


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>				
<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER Allison 4-19C5				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ALTAMONT				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME				
6. NAME OF OPERATOR EP ENERGY E&P COMPANY, L.P.						7. OPERATOR PHONE 713 997-5038				
8. ADDRESS OF OPERATOR 1001 Louisiana, Houston, TX, 77002						9. OPERATOR E-MAIL maria.gomez@epenergy.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) Fee			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee') VDR, LLC						14. SURFACE OWNER PHONE (if box 12 = 'fee') 435-659-6388				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 3867 Village Round Drive, ,						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL	FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN			
LOCATION AT SURFACE	707 FSL 786 FEL		SESE	19	3.0 S	5.0 W	U			
Top of Uppermost Producing Zone	707 FSL 786 FEL		SESE	19	3.0 S	5.0 W	U			
At Total Depth	707 FSL 786 FEL		SESE	19	3.0 S	5.0 W	U			
21. COUNTY DUCESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 107		23. NUMBER OF ACRES IN DRILLING UNIT 640					
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1600		26. PROPOSED DEPTH MD: 10700 TVD: 10700					
27. ELEVATION - GROUND LEVEL 5957			28. BOND NUMBER 400JU0708		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Duchesne City Water					
<b>Hole, Casing, and Cement Information</b>										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Cond	20	13.375	0 - 1000	54.5	J-55 LT&C	8.4	Class G	1238	1.15	15.8
Surf	12.25	9.625	0 - 3650	40.0	N-80 LT&C	8.9	Premium Lite High Strength	608	2.17	12.0
							Premium Lite High Strength	425	1.33	14.2
I1	8.75	7	0 - 8200	29.0	P-110 LT&C	9.9	Premium Lite High Strength	308	2.31	12.0
							Premium Lite High Strength	96	1.91	12.5
L1	6.125	4.5	8000 - 10700	13.5	P-110 LT&C	10.2	50/50 Poz	227	1.45	14.3
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME				TITLE				PHONE		
SIGNATURE				DATE 06/07/2012				EMAIL		
API NUMBER ASSIGNED 43013514660000				APPROVAL  Permit Manager						

**ALLISON 4-19C5  
Sec. 19, T3S, R5W  
DUCHESNE COUNTY, UT  
1/26/12**

**EL PASO E&P COMPANY, L.P.**

**DRILLING PROGRAM**

**1. Estimated Tops of Important Geologic Markers**

<u>Formation</u>	<u>Depth</u>
Green River	3,524'
Mahogany Bench	5,074'
L. Green River	6,374'
Wasatch	8,074'
TD	10,700'

**2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil	Green River	3,524'
	Mahogany Bench	5,074'
	L. Green River	6,374'
	Wasatch	8,074'

**3. Pressure Control Equipment: (Schematic Attached)**

A 5.0" by 20.0" rotating head on structural pipe from surface to 1000'. A 5.0" by 13 3/8" Rotating Head from 1000' to 3,650' on Conductor. A 5M BOP stack, 5M kill lines and choke manifold used from 3,650' to 8,200'. An 11.0", 10M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 8,200' to 10,700'. The BOPE and related equipment will meet the requirements of the 5M and 10M systems respectively.

**OPERATORS MINIMUM SPECIFIC FOR BOPE:**

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi Annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock, floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test and 4,000 psi high test. The 10M BOP will be installed with 3 1/2" pipe rams, blind rams, mud cross and rotating head from intermediate shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

**Statement on Accumulator System and Location of Hydraulic Controls:**

Precision Rig # 404 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

**Auxiliary Equipment:**

- A) Mud logger with gas monitor – 3,650' to TD
- B) Choke manifold with one manual and one hydraulic operated choke
- C) Full opening floor valve with drill pipe thread
- D) Upper and lower Kelly cock
- E) Shaker, desander and desilter.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached wellbore diagram and drilling program

All casing will meet or exceed the following design factors

Burst = 1.00

Collapse = 1.125

Tension = 1.2 (including 100k overpull)

Cement design calculations will be based on 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. 50% excess over gauge volume will be pumped on surface casing.

5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Type	Mud Weight
Conductor	WBM	8.4 – 8.9
Surface	WBM	8.9 – 9.9
Production	WBM	9.9 – 10.2

Anticipated mud weights are based on actual offset well bottom-hole pressure data plus trip margins. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program:**

Logs:

Mud Log: 3,650' - TD.

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from base of surface casing to TD.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 10,700' TD equals approximately 7,233 psi. This is calculated based on a 0.676 psi/foot gradient (13 ppg mud density at TD).

Maximum anticipated surface pressure based on bottom hole pressure equals approximately 4,879 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 10,000' = 4,754 psi

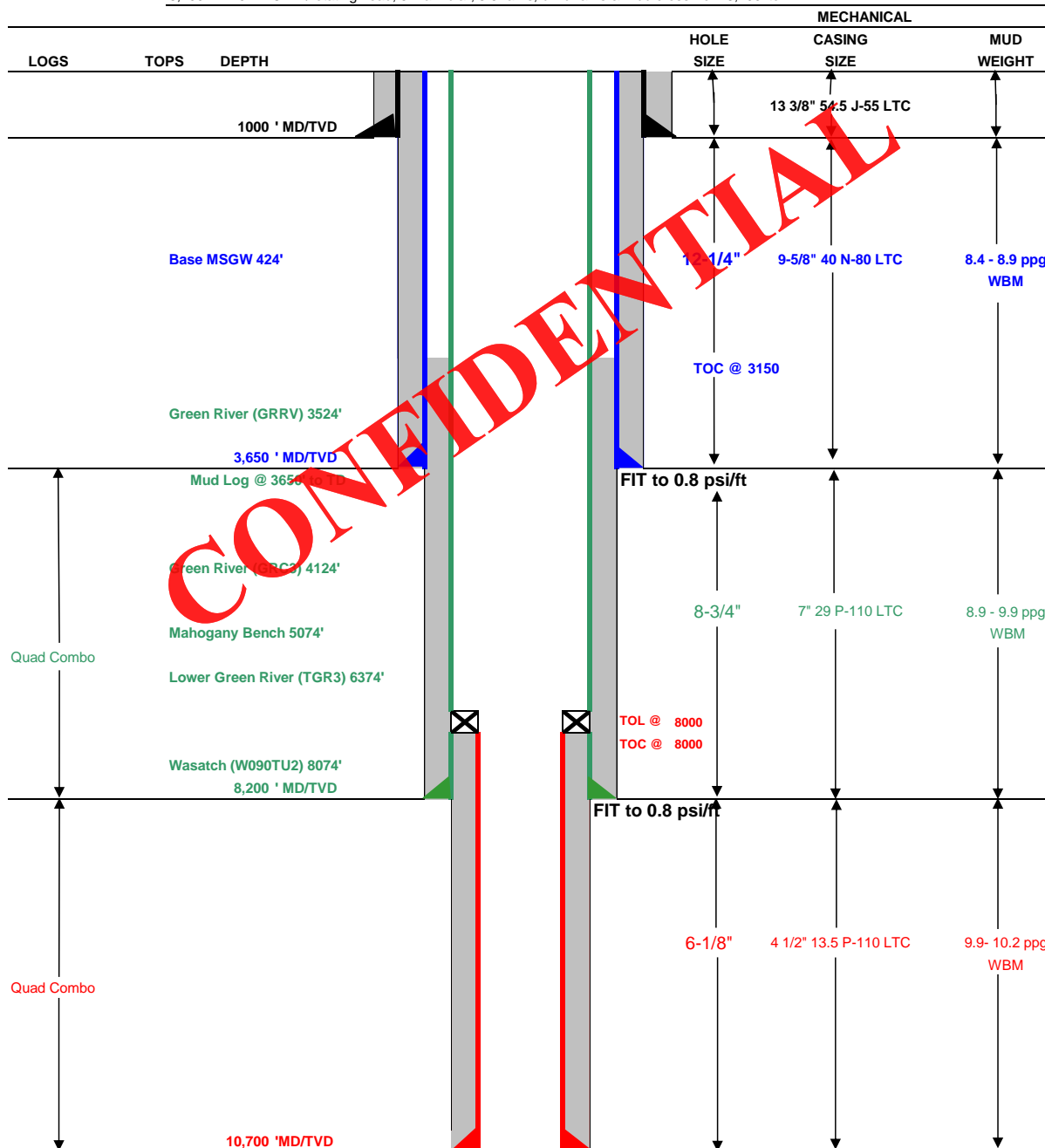
BOPE and casing design is based on the lesser of the two MASPs which is 4,754 psi

8. **OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.**



### Drilling Schematic

<b>Company Name:</b> El Paso Exploration & Production	<b>Date:</b> January 26, 2012
<b>Well Name:</b> Allison 4-19C5	<b>TD:</b> 10,700'
<b>Field, County, State:</b> Altamont - Bluebell, Duchesne, Utah	<b>AFE #:</b> 156902
<b>Surface Location:</b> Sec 19 T3S R5W 707' FSL 786' FEL	<b>BHL:</b> Straight Hole
<b>Objective Zone(s):</b> Green River, Wasatch	<b>Elevation:</b> 5957'
<b>Rig:</b> Precision 404	<b>Spud (est.):</b> June 25, 2012
<b>BOPE Info:</b> 5.0 x 13 3/8 rotating head from 1,000' to 3,650' 11 5M BOP stack and 5M kill lines and choke manifold used from 3,650' to 8,200' 11 10M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 8,200' to TD	



DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL			WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	-	1000	54.5	J-55	LTC	2,730	1,130	853
SURFACE	9-5/8"	0	-	3650	40.00	N-80	LTC	5,750	3,090	916
INTERMEDIATE	7"	0	-	8200	29.00	P-110	LTC	11,220	8,530	929
PRODUCTION LINER	4 1/2"	8000	-	10700	13.50	P-110	LTC	12,410	10,680	422

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		1000	Class G + 3% CACL2	1238	100%	15.0 ppg	1.15
SURFACE	Lead	2,650	Halco-light premium+3 lbm/sk Silicate+0.8% Econolite+2% Salt+2 lbm/sk Kol-Seal+0.25 lb/sk Kwik Seal	608	50%	12.0 ppg	2.17
	Tail	1,000	Halco-light premium+3 lbm/sk Silicate+0.3% Econolite+1% Salt+0.25 lbm/sk Kol-Seal+0.25 lb/sk Kwik Seal+HR-5	425	75%	14.2 ppg	1.33
INTERMEDIATE	Lead	4,050	Halco-Light Premium+4% Econolite+0.4% Econolite+0.2% Halad-322+3 lb/sk Silicalite Completed+0.8% HR-5+ 0.125 lb/sk Poly-E-Flake	308	10%	12.0 ppg	2.31
	Tail	1,000	Halco-Light-Premium+0.2% Econolite+ 0.3% Versaset+0.2% Halad322+0.8% HR-5+ 0.3% SuperCBL+ 0.125 lb/sk Poly-E-Flake	96	10%	12.5 ppg	1.91
PRODUCTION LINER		2,700	Halco- 50/50 Poz Premium Cement+20% SSA-1+0.3% Super CBL+ 0.3% Halad-344+0.3% Halad-413+ 0.2% SCR-100+ 0.125 lb/sk Poly-E-Flake + 3 lb/sk Silicat	227	25%	14.3 ppg	1.45

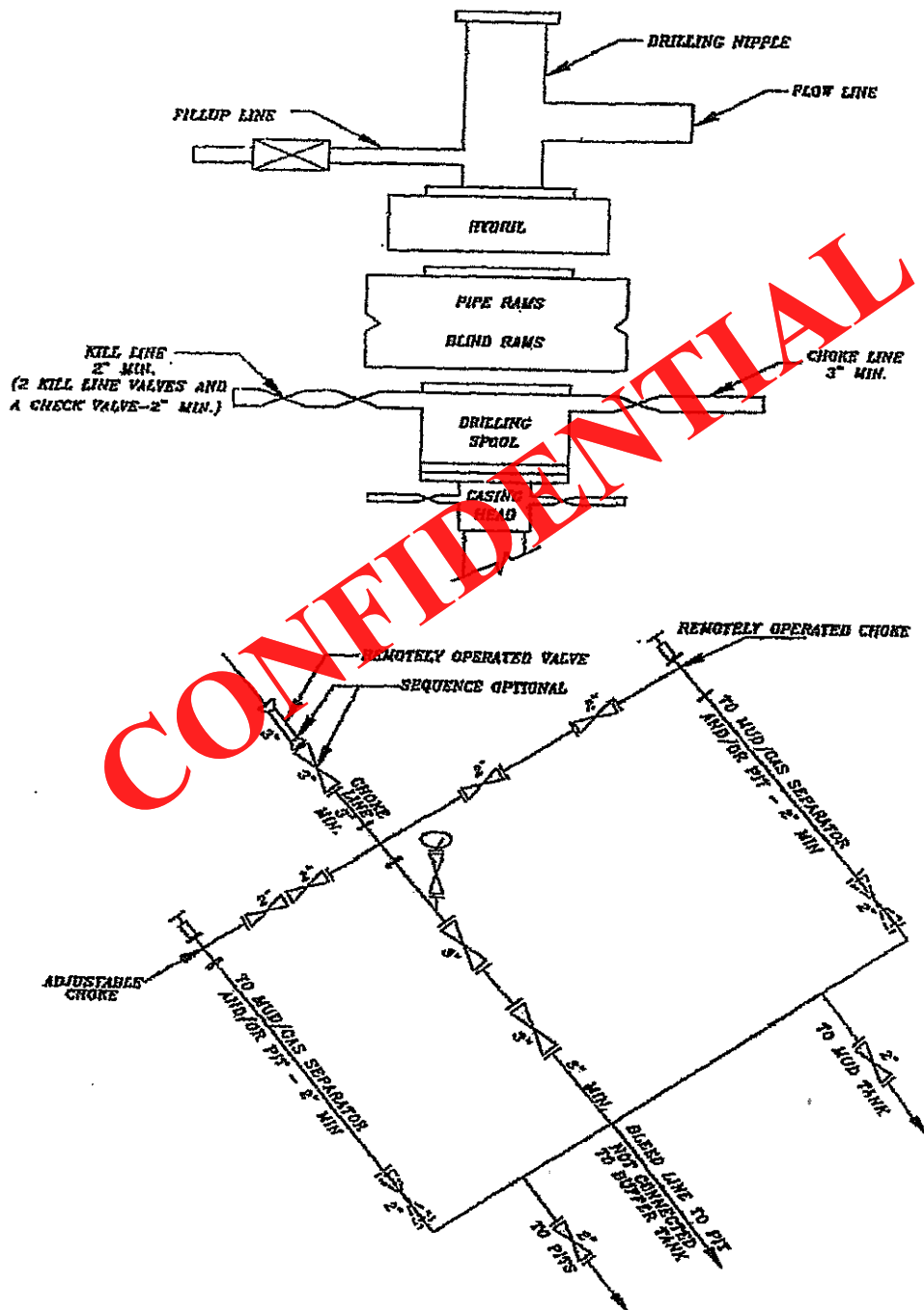
FLOAT EQUIPMENT & CENTRALIZERS

CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment.
LINER	Float shoe, 1 joint, float collar. Rigid centralizer every other joint. Thread lock all FE. Maker joints every 1000'.

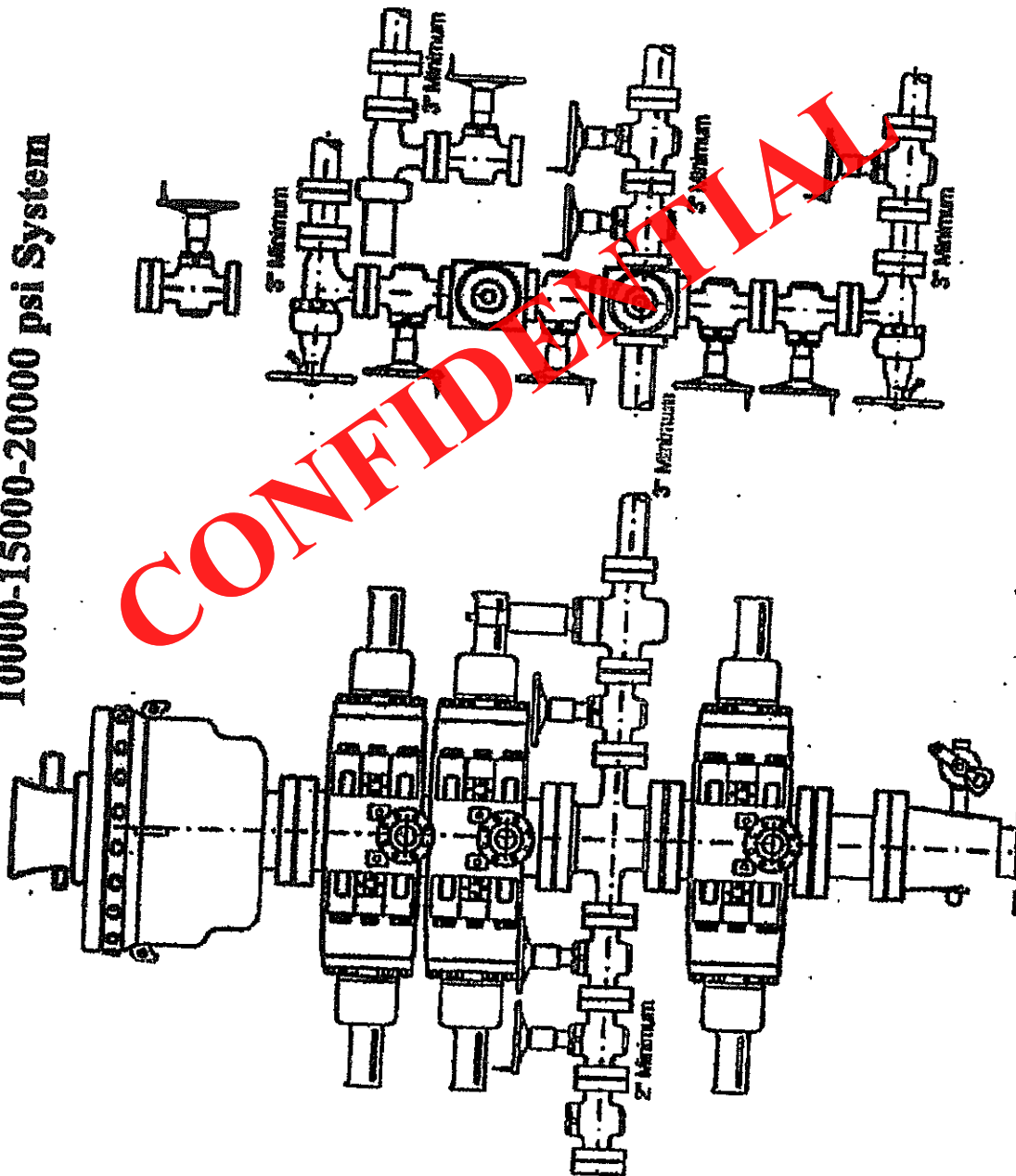
PROJECT ENGINEER(S): Brent Baker 713-420-3323

MANAGER: Scott Palmer

# 5M BOP STACK and CHOKE MANIFOLD SYSTEM



10000-15000-20000 psi System



**EL PASO E&P COMPANY, L.P.**  
**ALLISON 4-19C5**  
**SECTION 19, T3S, R5W, U.S.B. &M.**

PROCEED WEST ON PAVED STATE HIGHWAY 40 FROM THE INTERSECTION OF HIGHWAY 87 WITH U.S. HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 6.7 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL EAST AND THEN NORTH ON PAVED COUNTY ROAD 1.29 MILES TO AN INTERSECTION;

CONTINUE NORTH ON GRAVEL ROAD 3.13 MILES TO AN INTERSECTION.

TURN RIGHT AND TRAVEL SOUTHEASTERLY ON GRAVEL ROAD 0.98 MILES TO AN INTERSECTION.

CONTINUE SOUTHERLY ON GRAVEL ROAD 0.84 MILES TO AN INTERSECTION.

TURN RIGHT AND TRAVEL WESTERLY AND THEN SOUTHERLY 0.83 MILES TO AN INTERSECTION.

CONTINUE SOUTHERLY 0.39 MILES ON OLD ROAD GRADE (NEEDS IMPROVEMENT) TO THE BEGINNING OF THE ACCESS ROAD.

TURN RIGHT AND FOLLOW ROAD FLAGS WEST APPROXIMATELY 0.19 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 14.35 MILES.

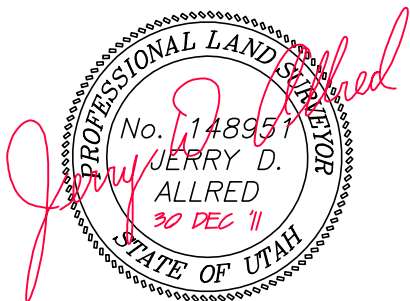
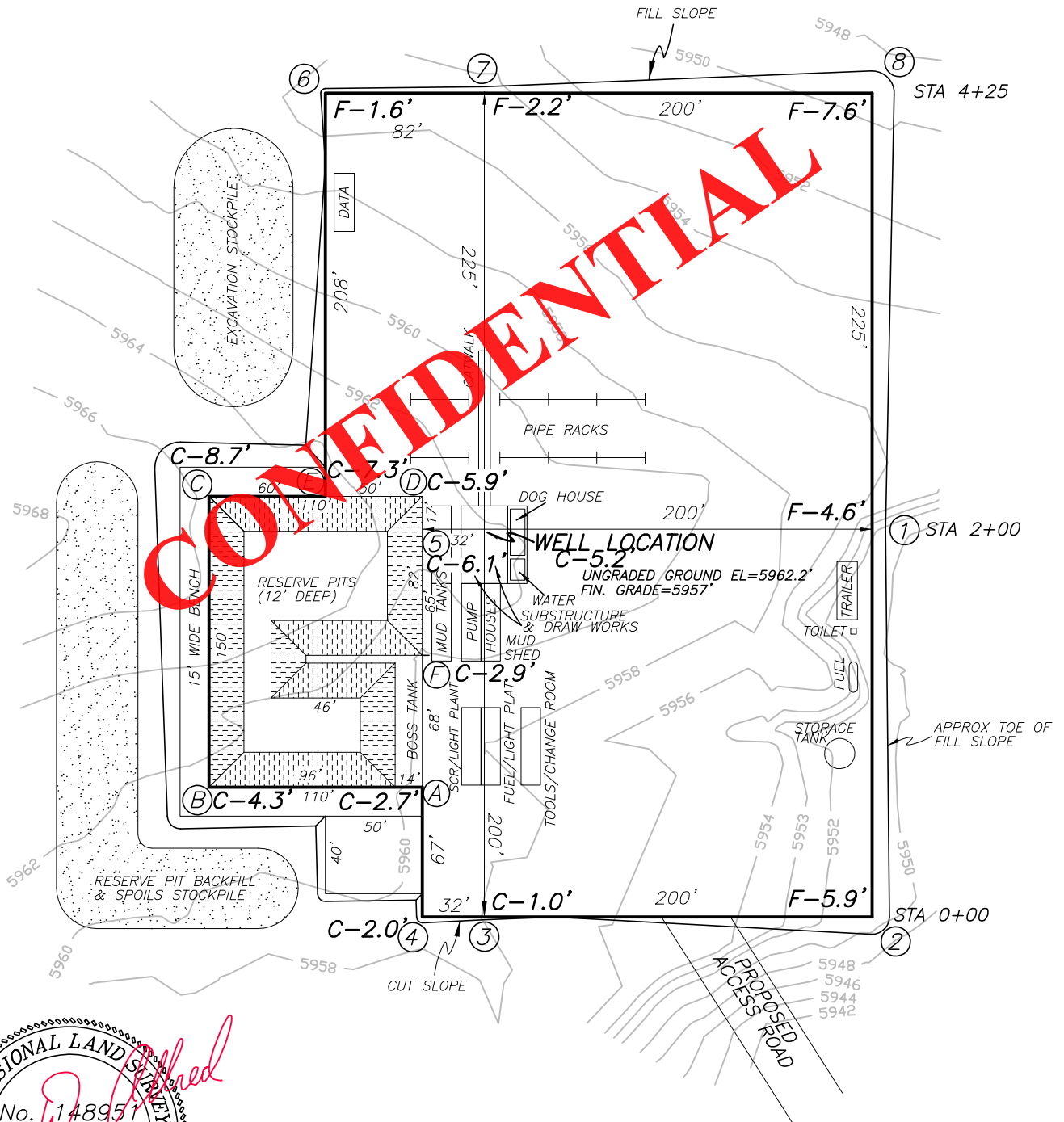
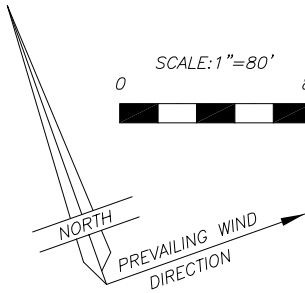
**EL PASO E & P COMPANY, L.P.**

LOCATION LAYOUT FOR

ALLISON 4-19C5

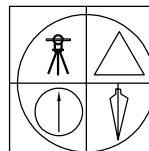
SECTION 19, T3S, R5W, U.S.B.&amp;M.

707' FSL, 786' FEL

**FIGURE #1**SCALE: 1"=80'  
0 80

30 DEC 2011

01-128-277

JERRY D. ALLRED & ASSOCIATES  
SURVEYING CONSULTANTS1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESTER, UTAH 84021  
(435) 738-5352

RECEIVED: June 07, 2012

**EL PASO E & P COMPANY, L.P.**

LOCATION LAYOUT FOR

ALLISON 4-19C5

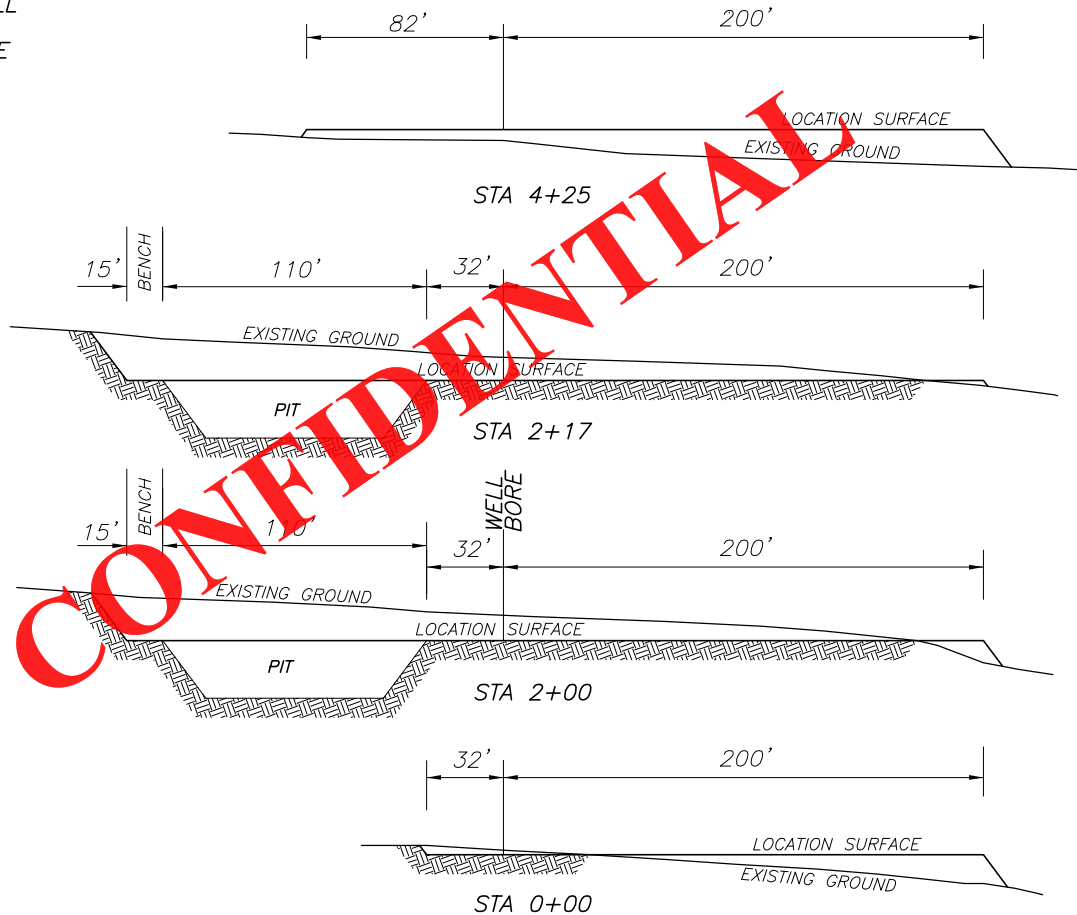
SECTION 19, T3S, R5W, U.S.B.&amp;M.

707' FSL, 786' FEL

**FIGURE #2**

1"=40'  
X-SECTION  
SCALE  
1"=80'

NOTE: ALL CUT/FILL  
SLOPES ARE 1½:1  
UNLESS OTHERWISE  
NOTED

APPROXIMATE QUANTITIES

TOTAL CUT (INCLUDING PIT) = 16,980 CU. YDS.

PIT CUT = 4572 CU. YDS.

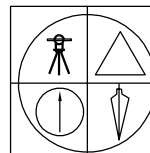
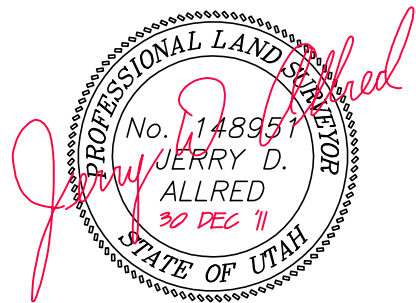
TOPSOIL STRIPPING: (6") = 2657 CU. YDS.

REMAINING LOCATION CUT = 9751 CU. YDS

TOTAL FILL = 8768 CU. YDS.

LOCATION SURFACE GRAVEL=1374 CU. YDS. (4" DEEP)

ACCESS ROAD GRAVEL=807 CU. YDS.

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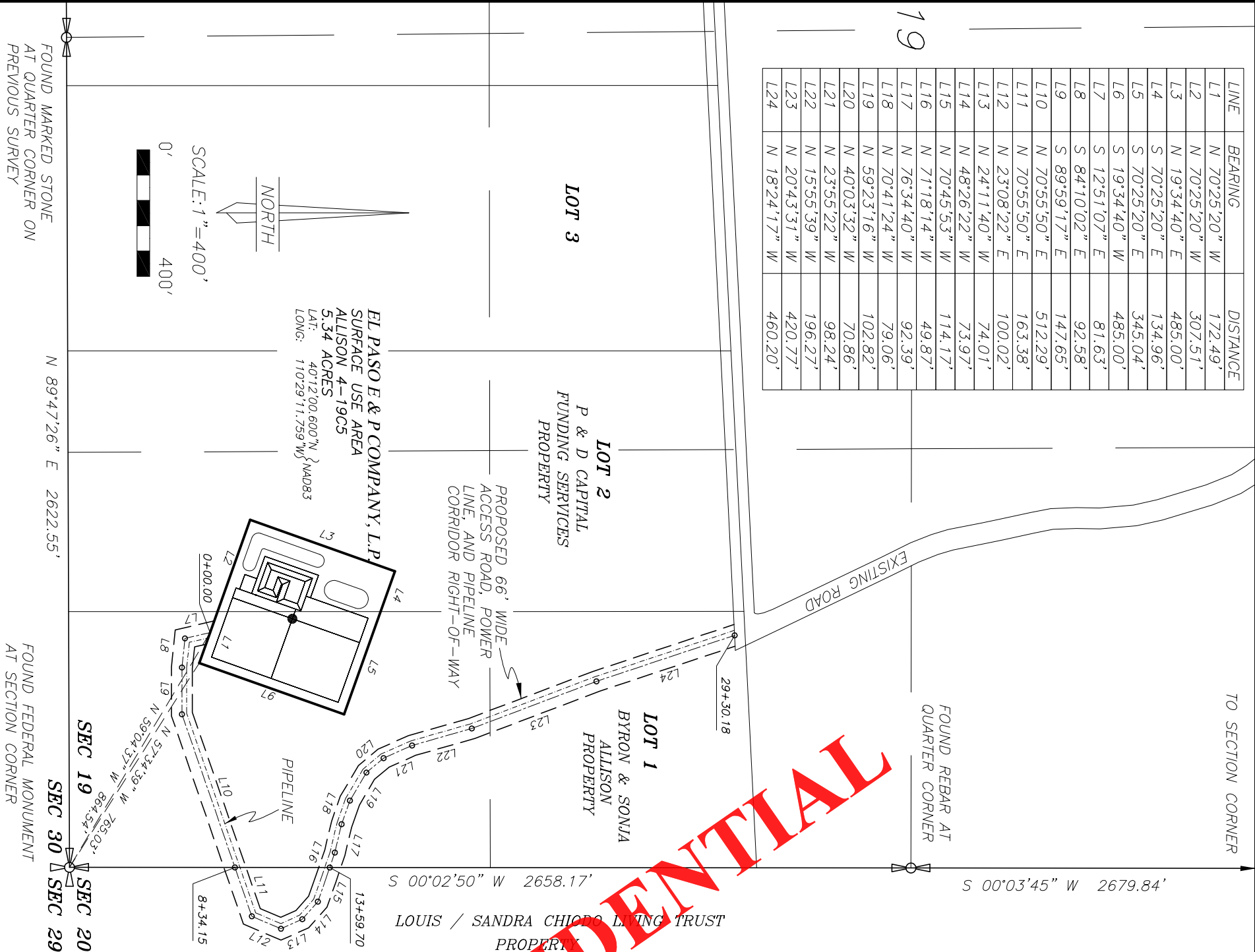
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LINE	BEARING	DISTANCE
L1	N 70°25'20" W	172.49'
L2	N 70°25'20" W	307.51'
L3	N 19°34'40" E	485.00'
L4	S 70°25'20" E	134.96'
L5	S 70°25'20" E	345.04'
L6	S 19°34'40" W	485.00'
L7	S 12°51'07" E	81.63'
L8	S 84°10'02" E	92.58'
L9	S 89°59'17" E	147.65'
L10	N 70°55'50" E	512.29'
L11	N 70°55'50" E	163.38'
L12	N 23°08'22" E	100.02'
L13	N 24°11'40" W	74.01'
L14	N 48°26'22" W	73.97'
L15	N 70°45'53" W	114.17'
L16	N 71°18'14" W	49.87'
L17	N 76°34'40" W	92.39'
L18	N 70°41'24" W	79.06'
L19	N 59°23'16" W	102.82'
L20	N 40°03'32" W	70.86'
L21	N 23°55'22" W	98.24'
L22	N 15°55'39" W	196.27'
L23	N 20°43'31" W	420.77'
L24	N 18°24'17" W	460.20'



LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE  
CORRIDOR RIGHT-OF-WAY SURVEY FOR  
**EL PASO E&P COMPANY, L.P.**  
**ALLISON 4-19C5**  
SECTION 19, T3S, R5W, U.S.B.&M.  
DUCHESNE COUNTY, UTAH

USE AREA BOUNDARY IN LOT 1

Commencing at the Southeast Corner of Section 19, Township 3 South, Range 5 West of the Uintah Special Base and Meridian; Thence North 57°34'39" West 765.03 feet to the TRUE POINT OF BEGINNING; Thence North 70°25'20" West 172.49 feet to the West line of Lot 1, Golden Eagle Subdivision; Thence North 00°00'25" West 514.78 feet along said West line; Thence South 70°25'20" East 134.96 feet to said East line; Thence South 00°00'25" East 514.78 feet to the TRUE POINT OF BEGINNING, containing 2.88 acres.

USE AREA BOUNDARY IN LOT 2

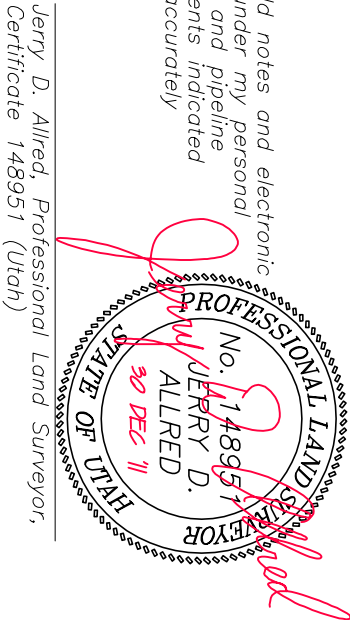
Commencing at the Southeast Corner of Section 19, Township 3 South, Range 5 West of the Uintah Special Base and Meridian; Thence North 57°34'39" West 765.03 feet; Thence North 70°25'20" West 172.49 feet to the TRUE POINT OF BEGINNING, said point being on the East line of Lot 2, Golden Eagle Subdivision; Thence North 70°25'20" West 307.51 feet; Thence North 19°34'40" East 485.00 feet; Thence South 70°25'20" East 134.96 feet to said East line; Thence South 00°00'25" East 514.78 feet to the TRUE POINT OF BEGINNING, containing 2.46 acres.

ACCESS ROAD, POWER LINE, AND PIPELINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 66 feet wide access road, power line and pipeline corridor right-of-way over parts of Sections 19 and 20, Township 3 South, Range 5 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows:  
Commencing at the Southeast Corner of said Section 19; Thence North 59°04'37" West 864.54 feet to the TRUE POINT OF BEGINNING, said point being on the South line of the El Paso E&P Allison 4-19C5 well location;  
Thence South 12°51'07" East 81.63 feet; Thence South 84°10'02" East 92.58 feet;  
Thence South 89°59'17" East 147.65 feet; Thence North 70°55'50" East 675.67 feet;  
Thence South 23°08'22" East 100.02 feet; Thence North 24°11'40" West 74.01 feet;  
Thence North 48°26'22" West 73.97 feet; Thence North 70°45'53" West 114.17 feet;  
Thence North 71°18'14" West 49.87 feet; Thence North 76°34'40" West 92.39 feet;  
Thence North 70°41'24" West 79.06 feet; Thence North 59°23'16" West 102.82 feet;  
Thence North 40°03'32" West 70.86 feet; Thence North 23°55'22" West 98.24 feet;  
Thence North 15°55'39" West 196.27 feet; Thence North 20°43'31" West 420.77 feet;  
Thence North 18°24'17" West 460.20 feet to the South line of and existing road. Said right-of-way being 2930.18 feet in length, with the sidelines being shortened or elongated to intersect the use boundary line of said location and the existing road right-of-way line.

SURVEYOR'S CERTIFICATE

This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area and access road, power line, and pipeline corridor right-of-way shown hereon, and that the monuments indicated were found or set during said survey, and that this plat accurately represents said survey to the best of my knowledge.



THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT A CONTROL POINT LOCATED AT LAT 40°13'50.440" N AND LONG 110°29'48.258" W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

30 DEC 2011 01-128-277



JERRY D. ALLRED AND ASSOCIATES

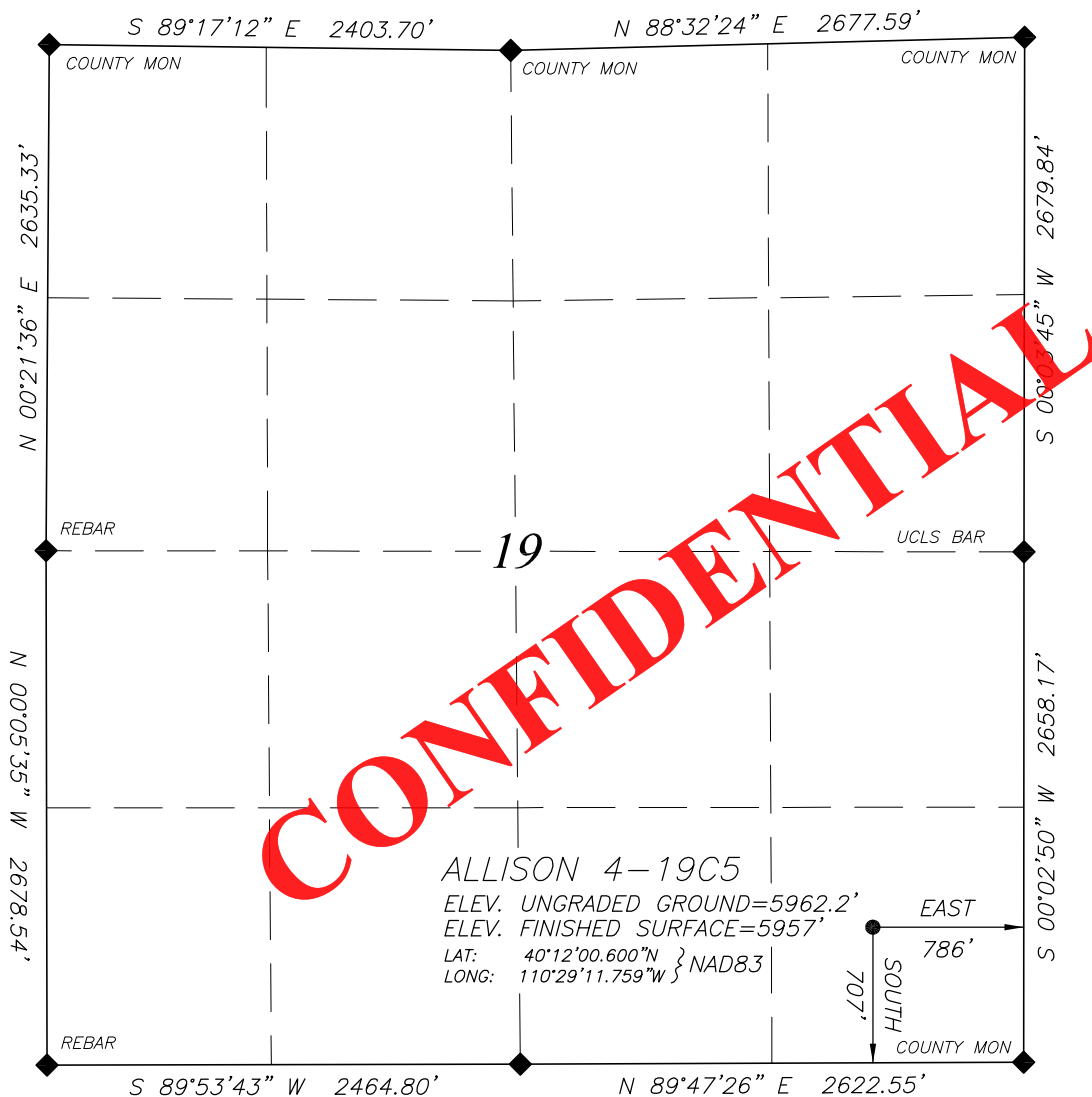
SURVEYING CONSULTANTS

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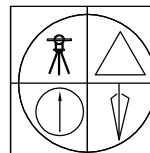
**EL PASO E & P COMPANY, L.P.**

WELL LOCATION

ALLISON 4-19C5

LOCATED IN THE SE¼ OF THE SE¼ OF  
SECTION 19, T3S, R5W, U.S.B.&M.  
DUCHESNE COUNTY, UTAH

SCALE: 1"=1000'

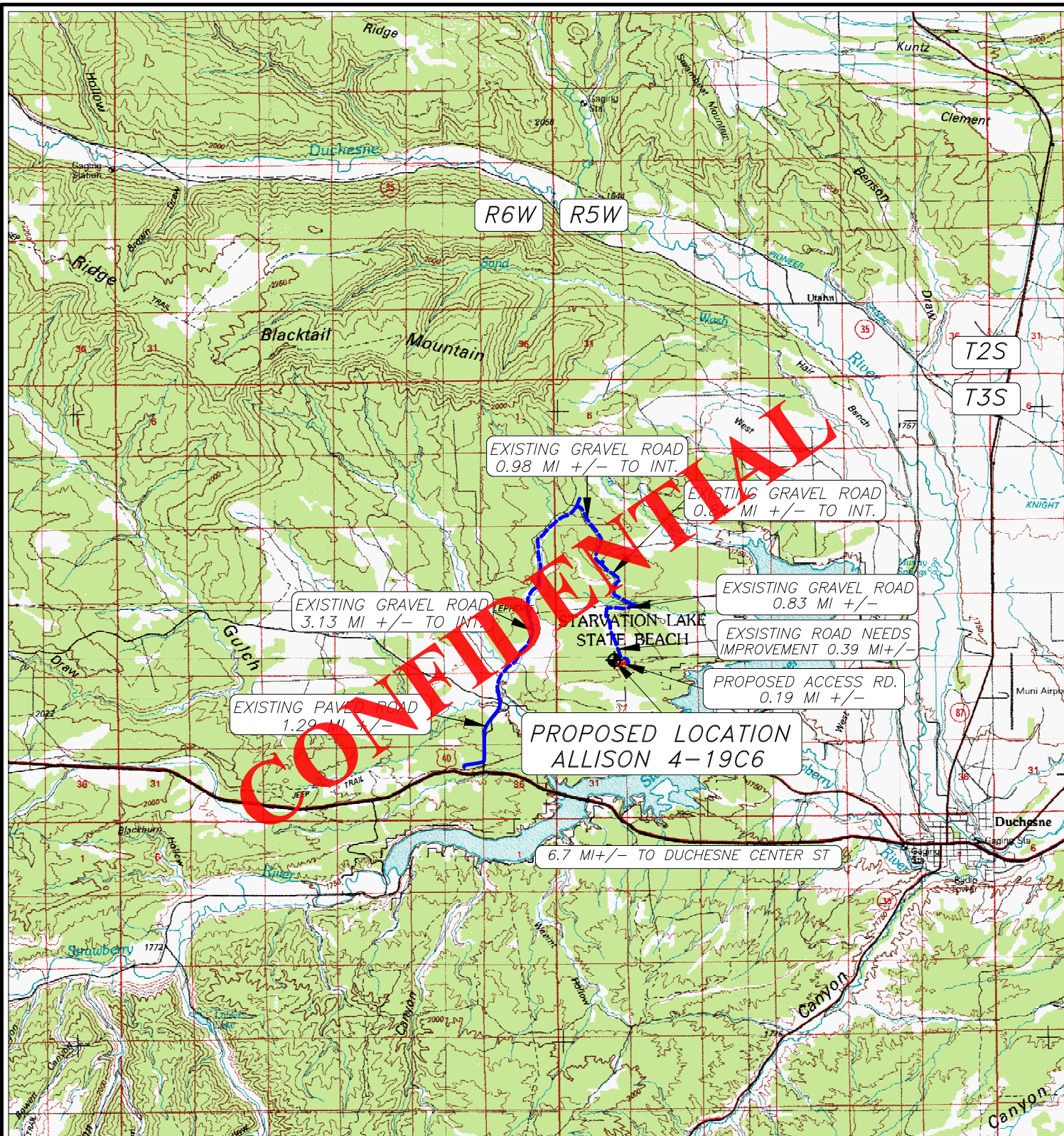
NOTE:  
NAD27 VALUES FOR  
WELL POSITION:  
LAT: 40.20021007° N  
LONG: 110.48588793° W**SURVEYOR'S CERTIFICATE**I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD  
NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL  
SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION,  
DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.JERRY D. ALLRED, REGISTERED LAND SURVEYOR,  
CERTIFICATE NO. 148951 (UTAH)JERRY D. ALLRED & ASSOCIATES  
SURVEYING CONSULTANTS1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESNE, UTAH 84021  
(435) 738-5352**LEGEND AND NOTES**

- ◆ CORNER MONUMENTS FOUND AND USED  
BY THIS SURVEY

THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS  
USED FOR REFERENCE AND CALCULATIONS AS  
WAS THE U.S.G.S. MAPTHIS SURVEY WAS PERFORMED USING GLOBAL  
POSITIONING SYSTEM PROCEDURES AND EQUIPMENTTHE BASIS OF BEARINGS IS GEODETIC NORTH  
DERIVED FROM G.P.S. OBSERVATIONS AT A CONTROL  
POINT LOCATED AT LAT 40°13'50.440"N AND  
LONG 110°29'48.258"W USING THE UTAH  
STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL  
NETWORK MAINTAINED AND OPERATED BY THE  
AUTOMATED GEOGRAPHIC REFERENCE CENTERBASIS OF ELEVATIONS: NAVD 88 DATUM USING  
THE UTAH REFERENCE NETWORK CONTROL SYSTEM

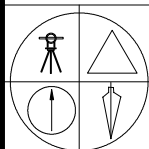
23 DEC 2011 01-128-277

RECEIVED: June 07, 2012

**LEGEND:**

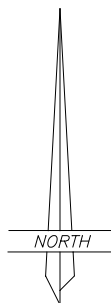
◆ PROPOSED WELL LOCATION

01-128-277



**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975  
DUCHEсне, UTAH 84021  
(435) 738-5352

**EL PASO E & P COMPANY, L.P.**

ALLISON 4-19C5

SECTION 19, T3S, R5W, U.S.B.&amp;M.

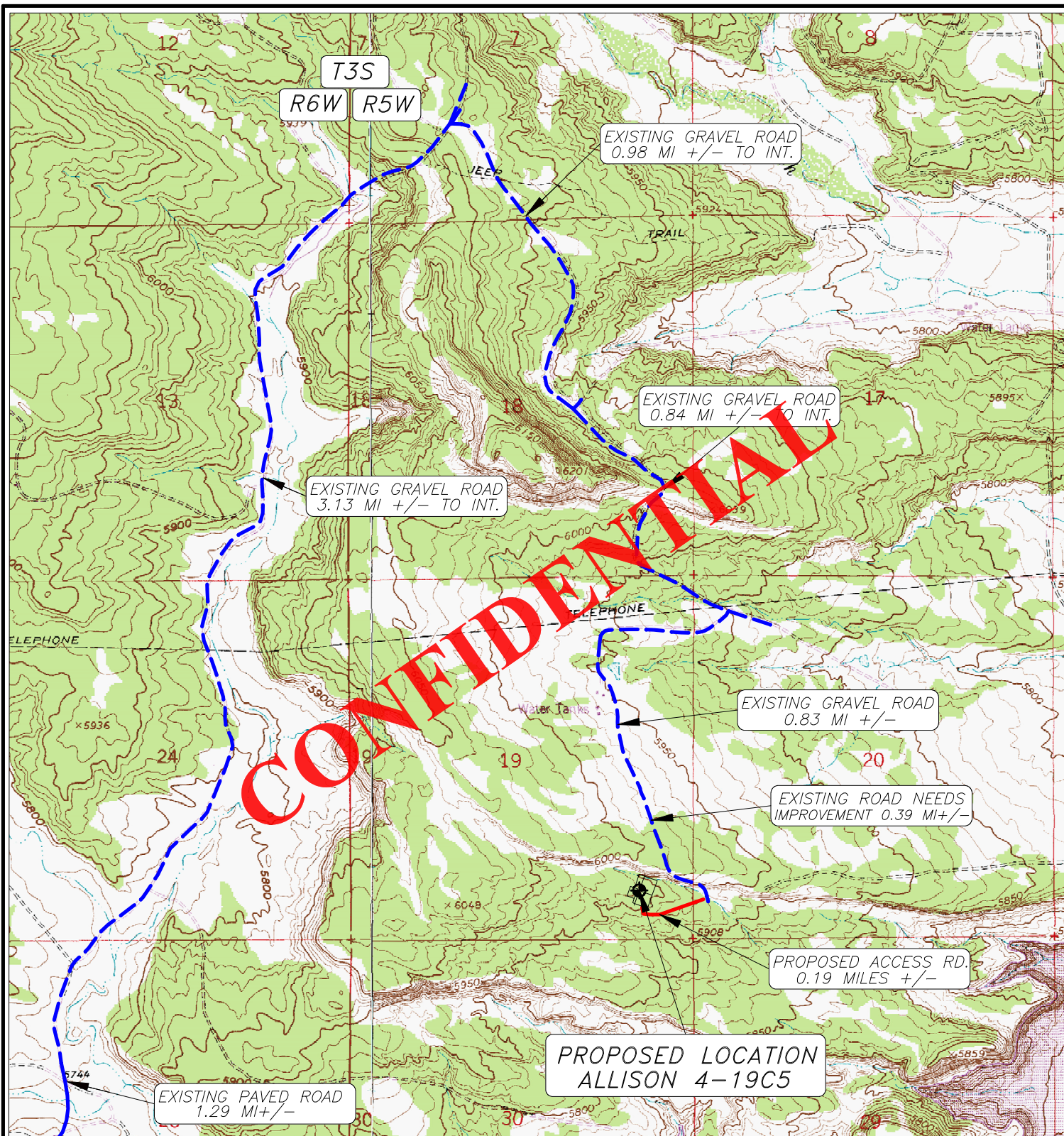
707' FSL 786' FEL

**TOPOGRAPHIC MAP "A"**

SCALE: 1"=10,000'

27 DEC 2011

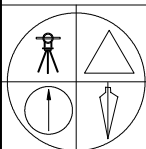
**RECEIVED:** June 07, 2012



## LEGEND:

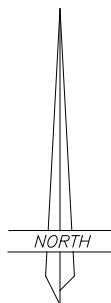
- PROPOSED WELL LOCATION
- PROPOSED ACCESS ROAD
- EXISTING GRAVEL ROAD
- EXISTING PAVED ROAD

01-128-277



**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESTER, UTAH 84021  
(435) 738-5352



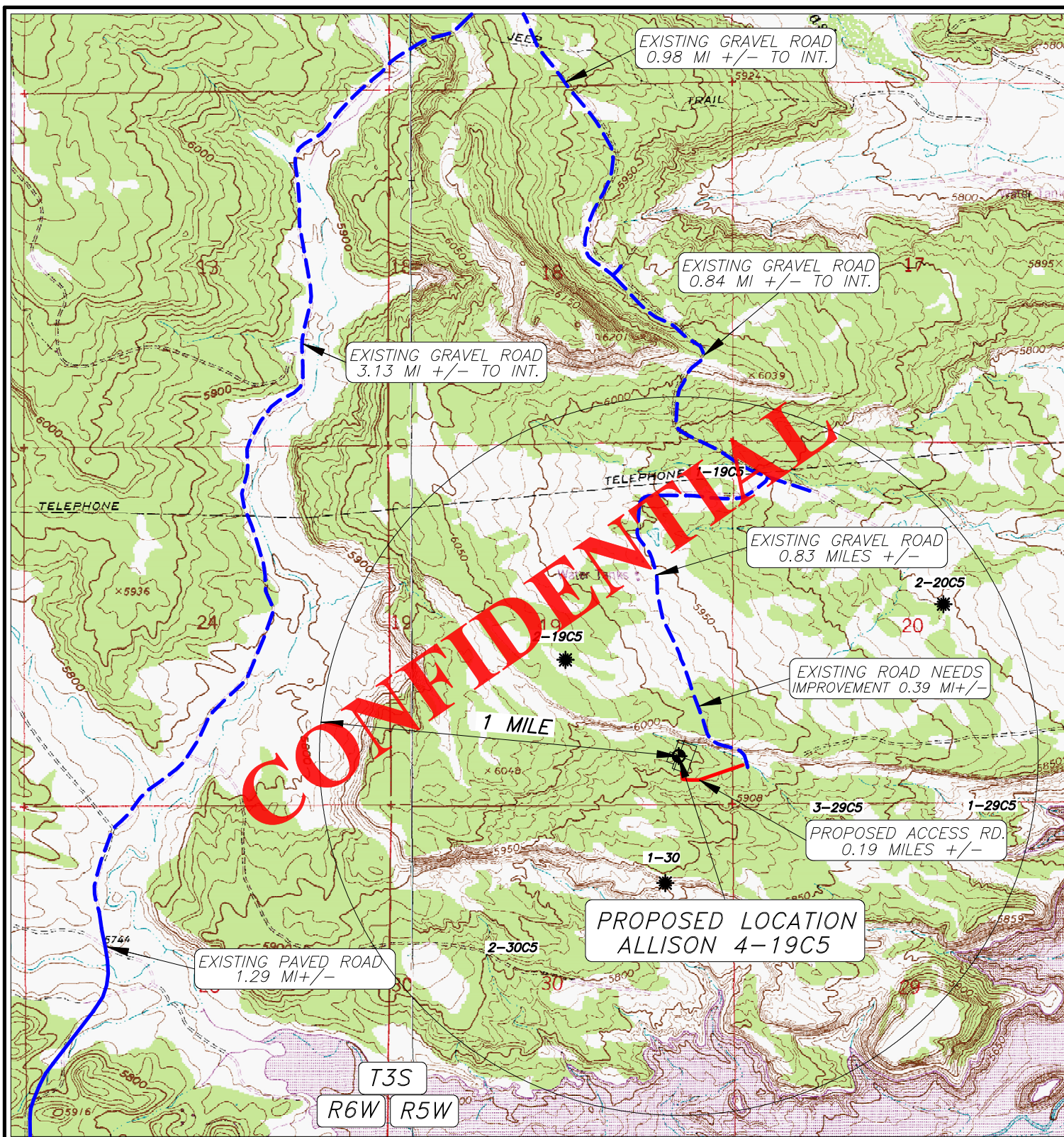
**EL PASO E & P COMPANY, L.P.**

ALLISON 4-19C5  
SECTION 19, T3S, R5W, U.S.B.&M.  
707' FSL 786' FEL

**TOPOGRAPHIC MAP "B"**

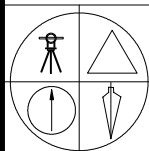
SCALE: 1"=2000'  
27 DEC 2011

RECEIVED: June 07, 2012

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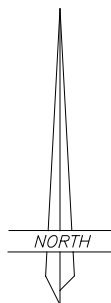
- ⊕ PROPOSED WELL LOCATION
- ★ OTHER WELLS AS LOCATED FROM  
2-25C6 SUPPLIED MAP

01-128-277



**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 N. 700 E.—P.O. BOX 975  
DUCHESTER, UTAH 84021  
(435) 738-5352

**EL PASO E & P COMPANY, L.P.**

ALLISON 4-19C5  
SECTION 19, T3S, R5W, U.S.B.&M.  
707' FSL 786' FEL

**TOPOGRAPHIC MAP "C"**

SCALE: 1"=2000'  
27 DEC 2011

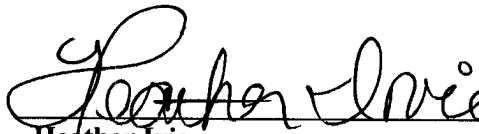
RECEIVED: June 07, 2012

**AFFIDAVIT OF SURFACE DAMAGE AND RIGHT-OF-WAY AGREEMENTS**

Heather Ivie personally appeared before me, and, being duly sworn, deposes and says:

1. My name is Heather Ivie. I am an Independent Landman, under contract with Transcontinent Oil Company, acting as Agent for El Paso E&P Company, L.P., whose address is 1001 Louisiana Street, Houston, Texas 77002 ("El Paso").
2. El Paso is the operator of the proposed Allison 4-19C5 Well ("the Well") to be located in Lot 1 of the Golden Eagle Subdivision, Phase 1 of Section 19, Township 3 South, Range 5 West, USM, Duchesne County, Utah (the "Drill Site Location"). The surface owner of the Drill Site Location is VRD, LLC, a Utah Limited Liability Company, represented by Bryan Allison, Manager, and Sonja Allison, Manager, whose address is 3867 Village Round Drive, Park City, Utah, 84098 and telephone number is (435) 659-6388 (the "Surface Owner").
3. El Paso and the Surface Owner have entered into a Damage Settlement and Release Agreement dated May 9, 2012 to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operation associated with the drilling of the Well.
4. El Paso and the Surface Owner have also entered into a Right-of-Way Agreement dated May 9, 2012 for an access road, pipeline and power line corridor across Lot 1 of the Golden Eagle Subdivision, Phase 1 of Section 19, Township 3 South, Range 5 West, USM, Duchesne County, Utah.

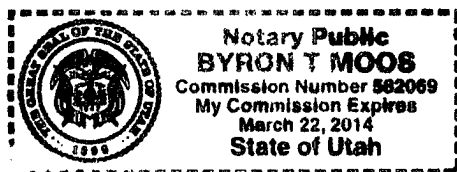
FURTHER AFFIANT SAYETH NOT.

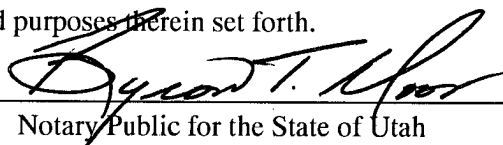
  
Heather Ivie

**ACKNOWLEDGEMENT**

STATE OF UTAH                    )  
  ) SS  
COUNTY OF DUCHESNE        )

This instrument was acknowledged before me on this the 10<sup>TH</sup> day of May, 2012 by **Heather Ivie**, as a Landman acting as Agent for EL PASO E&P COMPANY, L.P., a Delaware limited partnership, on behalf of said partnership and acknowledged to me that she executed the same as her own free and voluntary act and deed for the uses and purposes therein set forth.



  
Notary Public for the State of Utah

**EL PASO E&P COMPANY, L.P.**

**Related Surface Information**

**1. Current Surface Use:**

- Livestock Grazing and Oil and Gas Production.

**2. Proposed Surface Disturbance:**

- The road will be crown and ditch. Water wings will be constructed on the access road as needed.
- The topsoil will be windrowed and re-spread in the borrow area.
- New road to be constructed will be approximately .19 miles in length and 66 feet wide.
- All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

**3. Location Of Existing Wells:**

- Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

**4. Location And Type Of Drilling Water Supply:**

- Drilling water: Duchesne City Water

**5. Existing/Proposed Facilities For Productive Well:**

- There are no existing facilities that will be utilized for this well.
- A pipeline corridor .19 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line and one 2 inch gas line and one 2 inch salt water disposal line. Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
- Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

**6. Construction Materials:**

- Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

**7. Methods For Handling Waste Disposal:**

- The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be placed in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
- Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
- Sewage will be handled in Portable Toilets.
- Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a later date.
- Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

**8. Ancillary Facilities:**

- There will be no ancillary facilities associated with this project.

9. **Surface Reclamation Plans:**

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15<sup>th</sup>, and prior to ground frost, or seed will be planted after the frost has left and before May 15<sup>th</sup>. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
  1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
  2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
  3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.
- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.
  1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
  2. Landowner will be contacted for rehabilitation requirements.

10. **Surface Ownership:**

VRD, LLC  
3867 Village Round Drive  
Park City, Utah 84098  
435-659-6388

**Other Information:**

- The surface soil consists of clay, and silt.
- Flora – vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna – antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses – Livestock grazing and mineral exploration and production.

• **Operator and Contact Persons:**

**Construction and Reclamation:**

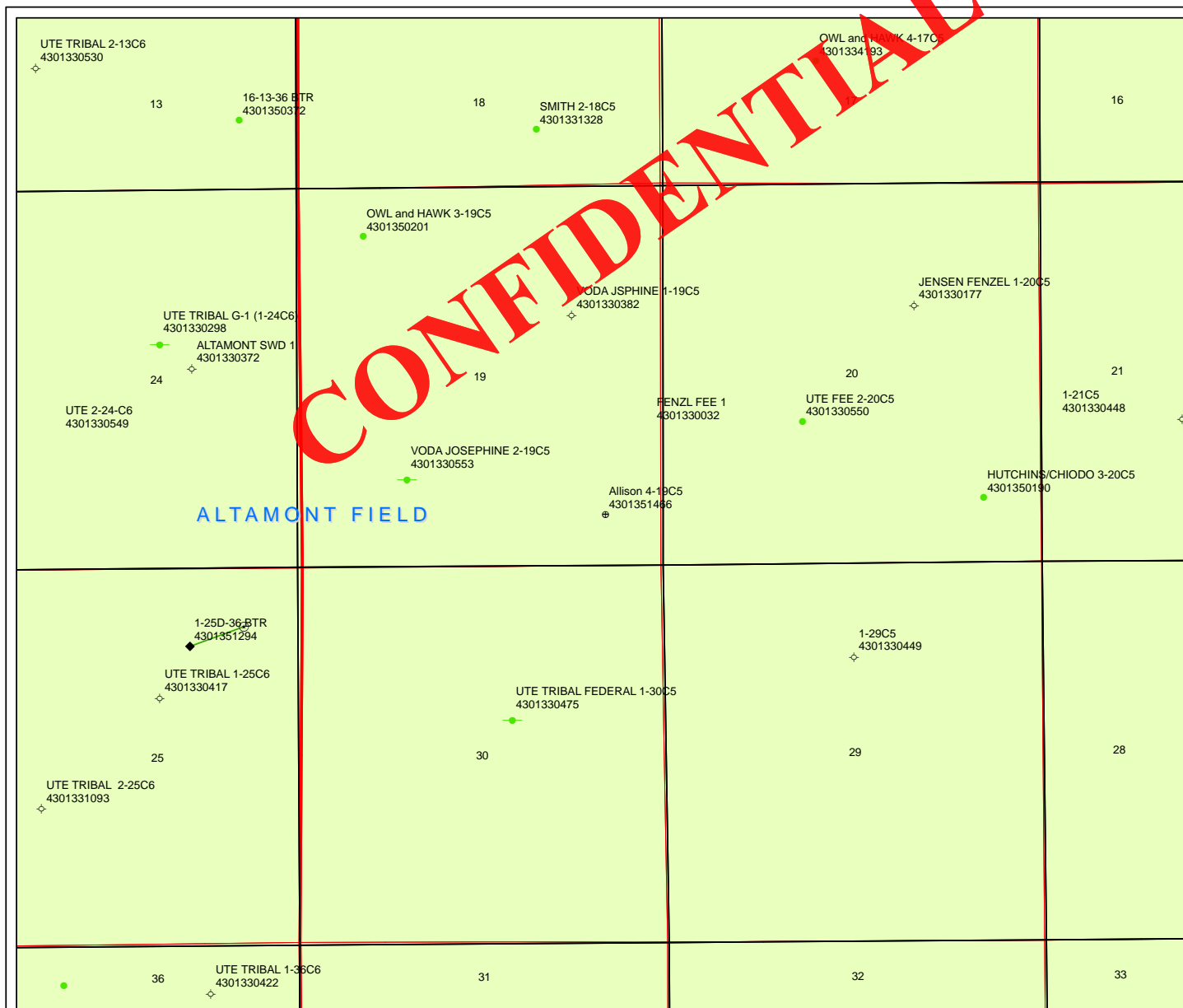
El Paso E & P Company  
Wayne Garner  
PO Box 410  
Altamont, Utah 84001  
435-454-3394 – Office  
435-823-1490 – Cell

**Regarding This APD**

El Paso E & P Company  
Maria S. Gomez  
1001 Louisiana, Rm 2730D  
Houston, Texas 77002  
713-997-5038 – Office

**Drilling**

El Paso E & P Company  
Joe Cawthorn – Drilling Engineer  
1001 Louisiana, Rm 2523B  
Houston, Texas 77002  
713-997-5929 – office  
832-465-2882 – Cell



API Number: 4301351466

Well Name: Allison 4-19C5

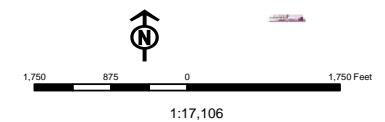
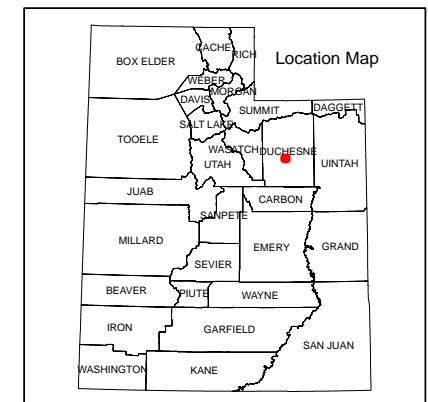
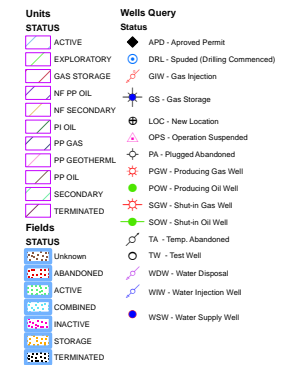
Township T0.3 . Range R0.5 . Section 19

Meridian: UBM

Operator: EL PASO E&amp;P COMPANY, LP

Map Prepared:

Map Produced by Diana Mason



Well Name	EP ENERGY E&P COMPANY, L.P. Allison 4-19C5 43013514660000			
String	Cond	Surf	I1	L1
Casing Size(in)	13.375	9.625	7.000	4.500
Setting Depth (TVD)	1000	3650	8200	10700
Previous Shoe Setting Depth (TVD)	0	1000	3650	8200
Max Mud Weight (ppg)	8.4	8.9	9.9	13.0
BOPE Proposed (psi)	1000	1000	5000	10000
Casing Internal Yield (psi)	2730	5750	11220	12410
Operators Max Anticipated Pressure (psi)	7233			13.0

Calculations	Cond String	13.375	"
Max BHP (psi)	.052*Setting Depth*MW=	437	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	317	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	217	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	217	NO OK
Required Casing/BOPE Test Pressure=		1000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

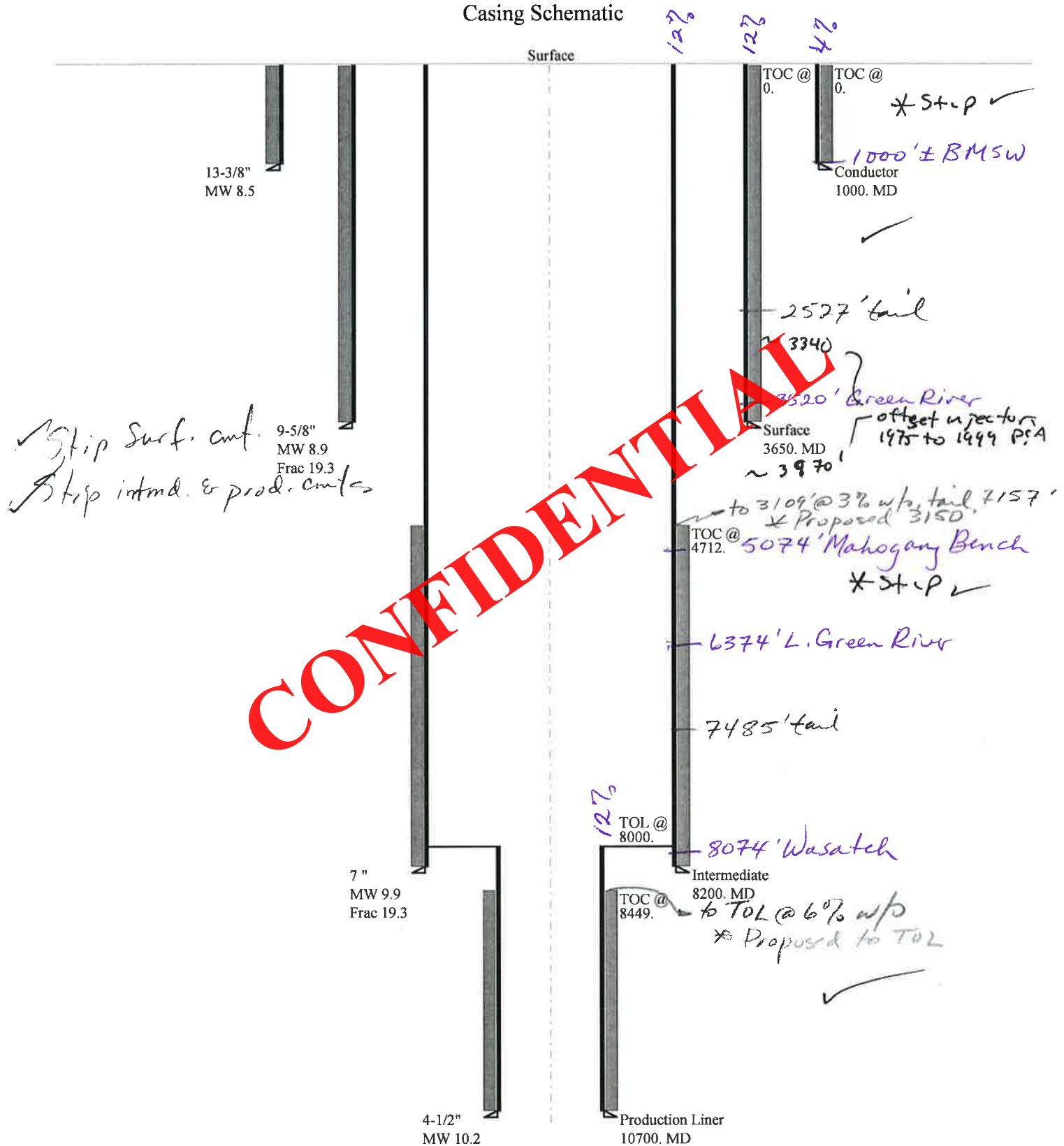
Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	1639	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1251	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	886	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1106	NO OK
Required Casing/BOPE Test Pressure=		3650	psi
*Max Pressure Allowed @ Previous Casing Shoe=		1000	psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	4221	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3237	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2417	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3220	YES OK
Required Casing/BOPE Test Pressure=		7854	psi
*Max Pressure Allowed @ Previous Casing Shoe=		3650	psi *Assumes 1psi/ft frac gradient

Calculations	L1 String	4.500	"
Max BHP (psi)	.052*Setting Depth*MW=	7233	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	5949	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	4879	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	6683	YES
Required Casing/BOPE Test Pressure=		8687	psi
*Max Pressure Allowed @ Previous Casing Shoe=		8200	psi *Assumes 1psi/ft frac gradient

## 43013514660000 Allison 4-19C5

## Casing Schematic



Well name:	<b>43013514660000 Allison 4-19C5</b>	
Operator:	<b>EL PASO E &amp; P COMPANY, LP</b>	
String type:	Conductor	Project ID: 43-013-51466
Location:	DUCESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 8.500 ppg  
Internal fluid density: 1.000 ppg

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 88 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 322 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 442 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on air weight.  
Neutral point: 874 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	1000	12.375	54.50	J-55	ST&C	1000	1000	12.49	12408
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	390	1130	2.900	442	2730	6.18	54.5	514	9.43 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: July 17, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 1000 ft, a mud weight of 8.5 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	<b>43013514660000 Allison 4-19C5</b>	
Operator:	<b>EL PASO E &amp; P COMPANY, LP</b>	Project ID:
String type:	Surface	43-013-51466
Location:	DUCHESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 8.900 ppg  
Internal fluid density: 1.000 ppg

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 125 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 2,413 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 3,216 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.70 (J)  
Buttress: 1.80 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on air weight.  
Neutral point: 3,167 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 8,200 ft  
Next mud weight: 9.900 ppg  
Next setting BHP: 4,217 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 3,650 ft  
Injection pressure: 3,650 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	3650	9.625	40.00	N-80	LT&C	3650	3650	8.75	46446

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	1498	3090	2.063	3216	5750	1.79	146	737	5.05 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: July 17, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 3650 ft, a mud weight of 8.9 ppg. An internal gradient of .052 psi/ft was used for collapse from TD to Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	<b>43013514660000 Allison 4-19C5</b>	
Operator:	<b>EL PASO E &amp; P COMPANY, LP</b>	
String type:	Intermediate	Project ID: 43-013-51466
Location:	DUCHESNE COUNTY	

**Design parameters:****Collapse**

Mud weight: 9.900 ppg  
Design is based on evacuated pipe.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 189 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

Cement top: 4,712 ft

**Burst**

Max anticipated surface pressure: 3,316 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,120 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on air weight.  
Neutral point: 6,971 ft

**Non-directional string.****Re subsequent strings:**

Next setting depth: 10,700 ft  
Next mud weight: 10.200 ppg  
Next setting BHP: 5,670 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 8,200 ft  
Injection pressure: 8,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	8200	7	29.00	P-110	LT&C	8200	8200	6.059	92599
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4217	8530	2.023	5120	11220	2.19	237.8	797	3.35 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: July 17, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 8200 ft, a mud weight of 9.9 ppg. The casing is considered to be evacuated for collapse purposes.  
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013514660000 Allison 4-19C5</b>	
Operator:	<b>EL PASO E &amp; P COMPANY, LP</b>	
String type:	Production Liner	Project ID: 43-013-51466
Location:	<b>DUCHESNE COUNTY</b>	

**Design parameters:****Collapse**

Mud weight: 10.200 ppg  
Internal fluid density: 1.500 ppg

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 224 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

Cement top: 8,449 ft

**Burst**

Max anticipated surface pressure: 3,316 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 5,670 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.60 (B)

Tension is based on air weight.  
Neutral point: 10,294 ft

Liner top: 8,000 ft

**Non-directional string.**

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2700	4.5	13.50	P-110	LT&C	10700	10700	3.795	15129

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	4836	10680	2.209	5670	12410	2.19	36.5	338	9.27 J

Prepared Helen Sadik-Macdonald  
by: Div of Oil, Gas & Mining

Phone: 801 538-5357  
FAX: 801-359-3940

Date: July 17, 2012  
Salt Lake City, Utah

**Remarks:**

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 10700 ft, a mud weight of 10.2 ppg. An Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

# **ON-SITE PREDRILL EVALUATION**

## **Utah Division of Oil, Gas and Mining**

**Operator** EP ENERGY E&P COMPANY, L.P.  
**Well Name** Allison 4-19C5  
**API Number** 43013514660000      **APD No** 6197      **Field/Unit** ALTAMONT  
**Location: 1/4,1/4 SESE**      **Sec** 19      **Tw** 3.0S      **Rng** 5.0W      707 FSL 786 FEL  
**GPS Coord (UTM)** 543692 4450104      **Surface Owner** VDR, LLC

### **Participants**

Jared Thacker (E&P Energy); Chad Shaw (EPE Houston); Orion Mitchell (EPE Energy); Ryan Allred (Allred Survey); Cameron Wilkerson (El Paso); Dennis Ingram (DOGM)

### **Regional/Local Setting & Topography**

This well is located in northeastern Utah, approximately 6.7 miles west of Duchense along US Highway 40, then north into the Rabbit Gulch area for 4.42 miles then turn southeast along existing roads to a bench overlooking the Strawberry Reservoir. The immediate topography at the well pad is relatively flat but staked up on a bench that drops off onto a second or lower bench that overlooks the lake. Rocky, sandstone shelves separate these two benches and the surface is dotted with pinion juniper habitat typical of the lower P/J elevation.

### **Surface Use Plan**

**Current Surface Use**  
Recreational

<b>New Road Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0.19	<b>Width</b> 342' <b>Length</b> 425'	Onsite	UNTA

**Ancillary Facilities** N

**Waste Management Plan Adequate?** Y

### **Environmental Parameters**

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

Pinion juniper, sagebrush, prickly pear cactus, rabbit brush, and other species native to this elevation of the region.

Potential mule deer winter range, mountain lion potential, rabbit, coyote, bird life typical of region and smaller mammals native to area.

#### **Soil Type and Characteristics**

Reddish in color, fine grained blow sand with some clays present and underlying sandstone

**Erosion Issues** Y

**Sedimentation Issues** Y

Site Stability Issues N

Drainage Diversion Required? N

Berm Required? Y

Erosion Sedimentation Control Required? N

Paleo Survey Run?      Paleo Potential Observed? N      Cultural Survey Run?      Cultural Resources? N

**Reserve Pit**

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	High permeability	20
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)		0
Affected Populations		
Presence Nearby Utility Conduits	Not Present	0
Final Score		25    1 Sensitivity Level

**Characteristics / Requirements**

Proposed reserve pit is staked along the southwestern corner of pad, in cut and measuring 100' wide by 150' long by 12' deep, having prevailing winds from the west.

Closed Loop Mud Required? N    Liner Required? Y    Liner Thickness 20    Pit Underlayment Required?

**Other Observations / Comments**

The landowner was contacted and invited to the presite, but telephoned E&P Energy stating they have had trouble and would not make the meeting. The landowner has been out with the operator several times and will be out again tomorrow to meet with the oil company. The operator has moved this well site to appease the landowner and also to get it out of the state park lands near the reservoir. This land is utilized by the landowners on a regular basis for camping and recreational use, according to the operator.

Dennis Ingram  
Evaluator

6/27/2012  
Date / Time

# Application for Permit to Drill Statement of Basis Utah Division of Oil, Gas and Mining

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Owner</b>	<b>CBM</b>
6197	43013514660000	LOCKED	OW	P	No
<b>Operator</b>	EP ENERGY E&P COMPANY, L.P.		<b>Surface Owner-APD</b>	VDR, LLC	
<b>Well Name</b>	Allison 4-19C5		<b>Unit</b>		
<b>Field</b>	ALTAMONT		<b>Type of Work</b>	DRILL	
<b>Location</b>	SESE 19 3S 5W U 707 FSL 786 FEL GPS Coord (UTM) 543692E 4450104N				

## Geologic Statement of Basis

El Paso proposes to set 1,000 feet of conductor and 3,650 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled utilizing fresh water mud. The estimated depth to the base of moderately saline ground water is 1,000 feet. A search of Division of Water Rights records indicates that there are 20 water wells within a 10,000 foot radius of the center of Section 19. These wells range in depth from 138-500 feet. These wells probably produce water from the Duchesne River Formation. The wells are listed as being used for irrigation, stock watering, oil exploration and domestic. The proposed drilling, casing and cement program should adequately protect usable ground water in this area.

Brad Hill  
APD Evaluator

7/10/2012  
Date / Time

## Surface Statement of Basis

Bryon Allison was shown as the landowner of record and therefore contacted by phone on June 18, 2012 and invited to the presite meeting scheduled for June 27, 2012 at 1:00 PM. E&P Energy received a call from the landowner the morning of the presite stating they had trouble and would not make the meeting, and would get with the operator the following day on any new issues they have. A landowner agreement is in place and the operator needs to meet those concerns. The operator has moved this well site to appease the landowner and also to get it out of the state park lands near the reservoir.

Well is located on a bench with rocky, sandstone shelves to the south overlooking another bench above the reservoir. The surface slopes east, northeast and has 4.8' of cut on the high end and 7.3 feet of fill on corner number 8. Underlying sandstone was observed just south of the location indicating blasting or a jack hammer will be utilized to cut the reserve pit. The operator shall make a smooth bottom to the reserve pit and install a 20 mil synthetic liner to prevent seepage of the drilling fluids. If necessary, a felt pad can be added to protect the liner. Berming shall also be done to prevent any fluids from leaving the well site, along with pit fencing to keep out wildlife.

Dennis Ingram  
Onsite Evaluator

6/27/2012  
Date / Time

## Conditions of Approval / Application for Permit to Drill

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 20 mils shall be properly installed and maintained in the reserve pit.

RECEIVED: August 08, 2012

Pits	The reserve pit should be located on the west side of the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.

**CONFIDENTIAL**

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/7/2012

API NO. ASSIGNED: 43013514660000

WELL NAME: Allison 4-19C5

OPERATOR: EP ENERGY E&amp;P COMPANY, L.P. (N3850)

PHONE NUMBER:

CONTACT:

PROPOSED LOCATION: SESE 19 030S 050W

Permit Tech Review: ☒

SURFACE: 0707 FSL 0786 FEL

Engineering Review: ☒

BOTTOM: 0707 FSL 0786 FEL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.20020

LONGITUDE: -110.48664

UTM SURF EASTINGS: 543692.00

NORTHINGS: 4450104.00

FIELD NAME: ALTAMONT

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee

PROPOSED PRODUCING FORMATION(S): WASATCH

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

## LOCATION AND SITING:

☒ PLAT☐ R649-2-3.☒ Bond: STATE/FEE - 400JU0703

Unit:

☐ Potash☐ R649-3-2. General☐ Oil Shale 190-5☐ R649-3-3. Exception☐ Oil Shale 190-3☒ Drilling Unit☐ Oil Shale 190-13☒ Water Permit: Duchesne City Water

Board Cause No: Cause 139-84

☐ RDCC Review:

Effective Date: 12/31/2008

☒ Fee Surface Agreement

Siting: 660' Fr Drl U Bdry &amp; 1320' Fr Other Wells

☐ Intent to Commingle☐ R649-3-11. Directional Drill

Commingle Approved

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhll  
9 - Cement casing to Surface - ddoucet  
12 - Cement Volume (3) - ddoucet  
25 - Surface Casing - hmacdonald

RECEIVED: August 08, 2012



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** Allison 4-19C5  
**API Well Number:** 43013514660000  
**Lease Number:** Fee  
**Surface Owner:** FEE (PRIVATE)  
**Approval Date:** 8/8/2012

### Issued to:

EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-84. The expected producing formation or pool is the WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volume for the 7" Intermediate string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 3150' as indicated in the submitted drilling plan.

Surface casing shall be cemented to the surface.

The cement volumes for the 13 3/8" casing shall be determined from actual hole conditions and the setting depth of the casing in order to place cement from the pipe setting depth back to the surface.

### Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and

mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program  
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**

**Approved By:**

A handwritten signature in black ink, appearing to read "J. Rogers", written over a faint horizontal line.

For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>			
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Fee			
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>			
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>			
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana, Houston, TX, 77002		<b>8. WELL NAME and NUMBER:</b> ALLISON 4-19C5			
<b>PHONE NUMBER:</b> 713 997-5038 Ext		<b>9. API NUMBER:</b> 43013514660000			
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1255 FSL 0540 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 19 Township: 03.0S Range: 05.0W Meridian: U		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT			
		<b>COUNTY:</b> DUCHESNE			
		<b>STATE:</b> UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>				
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: <b>9/20/2012</b>  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> ACIDIZE <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. EP Energy moved surface location as requested by landowner which now makes it an exception location. Please see attached revised location plat with survey package, drilling info and directional.					
		<b>Approved by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> September 18, 2012 <b>By:</b> <u><i>Derek Duff</i></u>			
<b>NAME (PLEASE PRINT)</b> Maria S. Gomez		<b>PHONE NUMBER</b> 713 997-5038			
<b>SIGNATURE</b> N/A		<b>TITLE</b> Principal Regulatory Analyst			
		<b>DATE</b> 9/18/2012			

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SEP 10 2012

DIV. OF OIL, GAS & MINING

August 28, 2012

VIA FACSIMILE (801) 359-3940

Mr. John Rogers  
Utah Division of Oil, Gas & Mining  
1594 West North Temple  
Salt Lake City, Utah 84116

RE: EP Energy E&P Company, L.P.'s Allison 4-19C5 Well  
Section 19, Township 3 South, Range 5 West  
Duchesne County, Utah

Dear Mr. Rogers,

Please be advised that EP Energy E&P Company, L.P. (EPE) has advised Hammack Rocket Properties LLC ("Hammack") of its need to obtain an exception location for its Allison 4-19C5 Well (the "Well") as the surface hole location of the Well is located 540' from the East line of Section 19, Township 3 South, Range 5 West and is therefore not in compliance with the applicable spacing rules.

Please be advised that Hammack, as a working interest owner of Section 20, T3S, R5W, consents to and has no objections to EPE's exception location request for the Well.

Sincerely,

**HAMMACK ROCKET PROPERTIES LLC**

Name: 

Its: owner PRES

Cc: Lauren Williams  
EP Energy E&P Company, L.P.

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AUG 30 2012

DIV. OF OIL, GAS & MINING

August 28, 2012

VIA FACSIMILE (801) 359-3940

Mr. John Rogers  
Utah Division of Oil, Gas & Mining  
1594 West North Temple  
Salt Lake City, Utah 84116

RE: EP Energy E&P Company, L.P.'s Allison 4-19C5 Well  
Section 19, Township 3 South, Range 5 West  
Duchesne County, Utah

Dear Mr. Rogers,

Please be advised that EP Energy E&P Company, L.P. (EPE) has advised Three M Oil Company ("Three M") of its need to obtain an exception location for its Allison 4-19C5 Well (the "Well") as the surface hole location of the Well is located 540' from the East line of Section 19, Township 3 South, Range 5 West and is therefore not in compliance with the applicable spacing rules.

Please be advised that Three M, as a working interest owner of Section 20, T3S, R5W, consents to and has no objections to EPE's exception location request for the Well.

Sincerely,

**THREE M OIL COMPANY**

Name: Cathy W. Arrington

Its: Vice President

Cc: Lauren Williams  
EP Energy E&P Company, L.P.



**Allison 4-19C5  
Sec. 19, T3S, R5W  
DUCHESNE COUNTY, UT  
9/18/12**

**EL PASO E&P COMPANY, L.P.**

**DRILLING PROGRAM**

**1. Estimated Tops of Important Geologic Markers**

<u>Formation</u>	<u>Depth</u>
Green River(GRRV)	3,561'
Green River(GRTN1)	4,161'
Mahogany Bench	5,111'
L. Green River	6,411'
Wasatch	8,111'
TD(Permit)	10,700'

**2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River(GRRV)	3,561'
	Green River(GRTN1)	4,161'
	Mahogany Bench	5,111'
Oil	L. Green River	6,411'
Oil	Wasatch	8,111'

**3. Pressure Control Equipment: (Schematic Attached)**

A 5.0" by 20.0" rotating head on structural pipe from surface to 800'. A 5.0" by 13 3/8" Rotating Head from 800' to 3,560' on Conductor. A 5M BOP stack, 5M kill lines and choke manifold used from 3,560' to 8,208'. An 11.0", 10M BOE w/rotating head, 5M annular, 3.5 rams, blind rams & mud cross from 8,200' to 10,708'. The BOPE and related equipment will meet the requirements of the 5M and 10M systems respectively.

**OPERATORS MINIMUM SPECIFIC FOR BOPE:**

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi Annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock, floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test and 4,000 psi high test. The 10M BOP will be installed

with 3 ½" pipe rams, blind rams, mud cross and rotating head from intermediate shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

**Statement on Accumulator System and Location of Hydraulic Controls:**

Precision Rig # 404 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

**Auxiliary Equipment:**

- A) Mud logger with gas monitor – 3,560' to TD
- B) Choke manifold with one manual and one hydraulic operated choke
- C) Full opening floor valve with drill pipe thread
- D) Upper and lower Kelly cock
- E) Shaker, desander and desilter.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached wellbore diagram and drilling program

All casing will meet or exceed the following design factors

Burst = 1.00

Collapse = 1.125

Tension = 1.2 (including 100k overpull)

Cement design calculations will be based on 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. 50% excess over gauge volume will be pumped on surface casing.

5. **Drilling Fluids Program:**

Proposed Mud Program:

Interval	Type	Mud Weight
Conductor	WBM	8.4 – 8.9
Surface	WBM	8.9 – 10.0
Production	WBM	10.0 – 11.0

Anticipated mud weights are based on actual offset well bottom-hole pressure data plus trip margins. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. **Evaluation Program:**

Logs:

Mud Log: 3,560' - TD.

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from base of surface casing to TD.

7. **Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 10,708' TD equals approximately 6,596 psi. This is calculated based on a 0.616 psi/foot gradient (11 ppg mud density at TD).

Maximum anticipated surface pressure based on bottom hole pressure equals approximately 4,240 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 8,208' = 6,566 psi

BOPE and casing design is based on the lesser of the two MASPs which is 4,240 psi

8. **OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.**

			MECHANICAL		
LOGS	TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		800 ' MD/TVD		13 3/8" 54.5 J-55 LTC	
		Base MSGW 424'	12-1/4"	9-5/8" 40 N-80 LTC	8.8 - 9.5 ppg WBM
		3,560 ' MD/TVD	TOC @ 3060		
		Mud Logger @ 3,560'	FIT to 0.8 psi/ft		
		Green River (GRRV) 3561'			
		Green River (GRTN1) 4161'			
		Mahogany Bench 5111'	8-3/4"	7" 29 P-110 LTC	9.5 - 10.0 ppg WBM
		Lower Green River (TGR3) 6411'			
		Wasatch (W090TU2) 8111'			
		8,208 MD/8200 TVD	TOL @ 8008 TOC @ 8008		
			FIT to 0.8 psi/ft		
			6-1/8"	4 1/2" 13.5 P-110 LTC	10.0 - 11.0 ppg WBM
		10,708 MD/10700TVD			

**RECEIVED: Sep. 18, 2012**

DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0	800	54.5	J-55	LTC	2,730	1,140	1,399
SURFACE	9-5/8"	0	3560	40.00	N-80	LTC	3,090	5,750	820
INTERMEDIATE	7"	0	8208	29.00	P-110	LTC	11,220	8,530	797
PRODUCTION LINER	4 1/2"	8008	10708	13.50	P-110	LTC	12,410	10,680	338

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR		800	Class G + 3% CACL2	1000	100%	15.8 ppg	1.15
SURFACE	Lead	3,060	Boral Craig POZ 35%, Mountain G 65%, Bentonite Wyoming 8%, Silicate 5 lbm/sk, Pol-E Flake 0.125 lbm/sk, Kwik Seal 0.25 lb/sk	714	75%	12.0 ppg	2.14
	Tail	500	Halco-light premium+3 lb/sk Silicate+0.3% Econolite+1% Salt+0.25 lbm/sk Kol-Seal+0.24 lb/sk Kwik Seal+ HR-5	191	50%	14.2 ppg	1.33
INTERMEDIATE	Lead	4,148	Halco-Light-Premium+4% Bentonite+0.4% Econolite+0.2% Halad322+3 lb/sk Silicalite Compacted+0.8% HR-5+ 0.125 lb/sk Poly-E-Flake	295	10%	12.0 ppg	2.31
	Tail	1,000	Halco-Light-Premium+0.2% Econolite+ 0.3% Versaset+0.2% Halad322+0.8% HR-5+ 0.3% SuperCBL+ 0.125 lb/sk Poly-E-Flake	91	10%	12.5 ppg	1.91
PRODUCTION LINER		2,700	Halco- 50/50 Poz Premium Cement+20% SSA-1+0.3% Super CBL+ 0.3% Halad-344+0.3% Halad-413+ 0.2% SCR-100+ 0.125 lb/sk Poly-E-Flake + 3 lb/sk Silicat	200	25%	12.30	1.61

FLOAT EQUIPMENT & CENTRALIZERS	
CONDUCTOR	PDC drillable guide shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable guide shoe, 1 joint casing, PDC drillable float collar & Stage collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	PDC drillable 10M,P-110 float shoe, 1 joint, PDC drillable 10M, P-110 float collar. Thread lock all float equipment. Maker joint at 8,000'.
LINER	Float shoe, 1 joint, float collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Joe Cawthorn 713-997-5929MANAGER: Tommy Gaydos

**EL PASO E&P COMPANY, L.P.**  
**ALLISON 4-19C5**  
**SECTION 19, T3S, R5W, U.S.B.&M.**

PROCEED WEST ON PAVED STATE HIGHWAY 40 FROM THE INTERSECTION OF HIGHWAY 87 WITH U.S. HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 6.7 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL EAST AND THEN NORTH ON PAVED COUNTY ROAD 1.29 MILES TO AN INTERSECTION;

CONTINUE NORTH ON GRAVEL ROAD 3.13 MILES TO AN INTERSECTION.

TURN RIGHT AND TRAVEL SOUTHEASTERLY ON GRAVEL ROAD 0.98 MILES TO AN INTERSECTION.

CONTINUE SOUTHERLY ON GRAVEL ROAD 0.84 MILES TO AN INTERSECTION.

TURN RIGHT AND TRAVEL WESTERLY AND THEN SOUTHERLY 0.83 MILES TO AN INTERSECTION.

CONTINUE SOUTHERLY 0.15 MILES ON OLD ROAD GRADE (NEEDS IMPROVEMENT) TO THE PROPOSED WELL LOCATION.

FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 13.92 MILES.

RECEIVED: Sep. 18, 2012

**EL PASO E & P COMPANY, L.P.**

LOCATION LAYOUT FOR

ALLISON 4-19C5

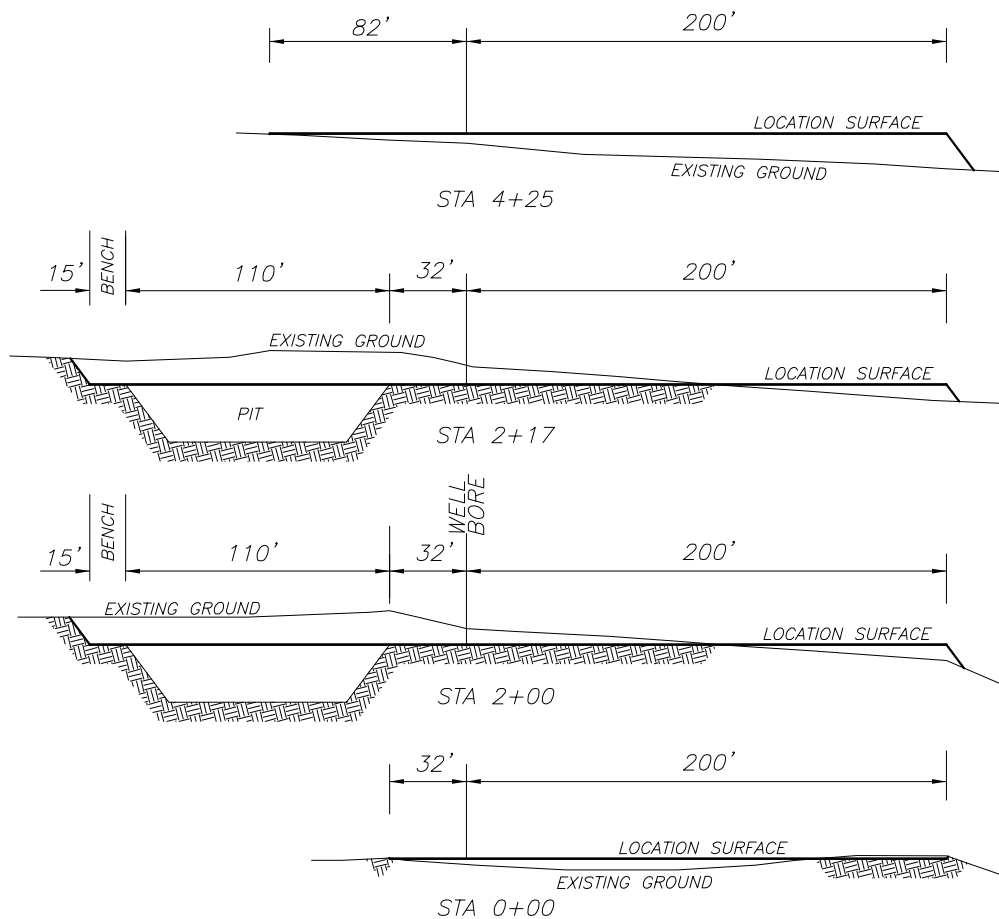
SECTION 19, T3S, R5W, U.S.B.&amp;M.

1255' FSL, 540' FEL

FIGURE #2

1"=40'  
X-SECTION  
SCALE  
1"=80'

NOTE: ALL CUT/FILL  
SLOPES ARE 1½:1  
UNLESS OTHERWISE  
NOTED

APPROXIMATE QUANTITIES

TOTAL CUT (INCLUDING PIT) = 13,826 CU. YDS.

PIT CUT = 4572 CU. YDS.

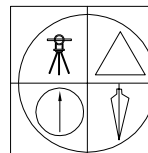
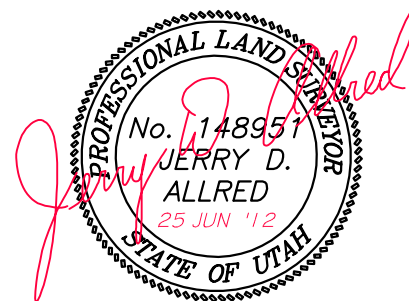
TOPSOIL STRIPPING: (6") = 2610 CU. YDS.

REMAINING LOCATION CUT = 6644 CU. YDS

TOTAL FILL = 5036 CU. YDS.

LOCATION SURFACE GRAVEL=1374 CU. YDS. (4" DEEP)

ACCESS ROAD GRAVEL=167 CU. YDS.



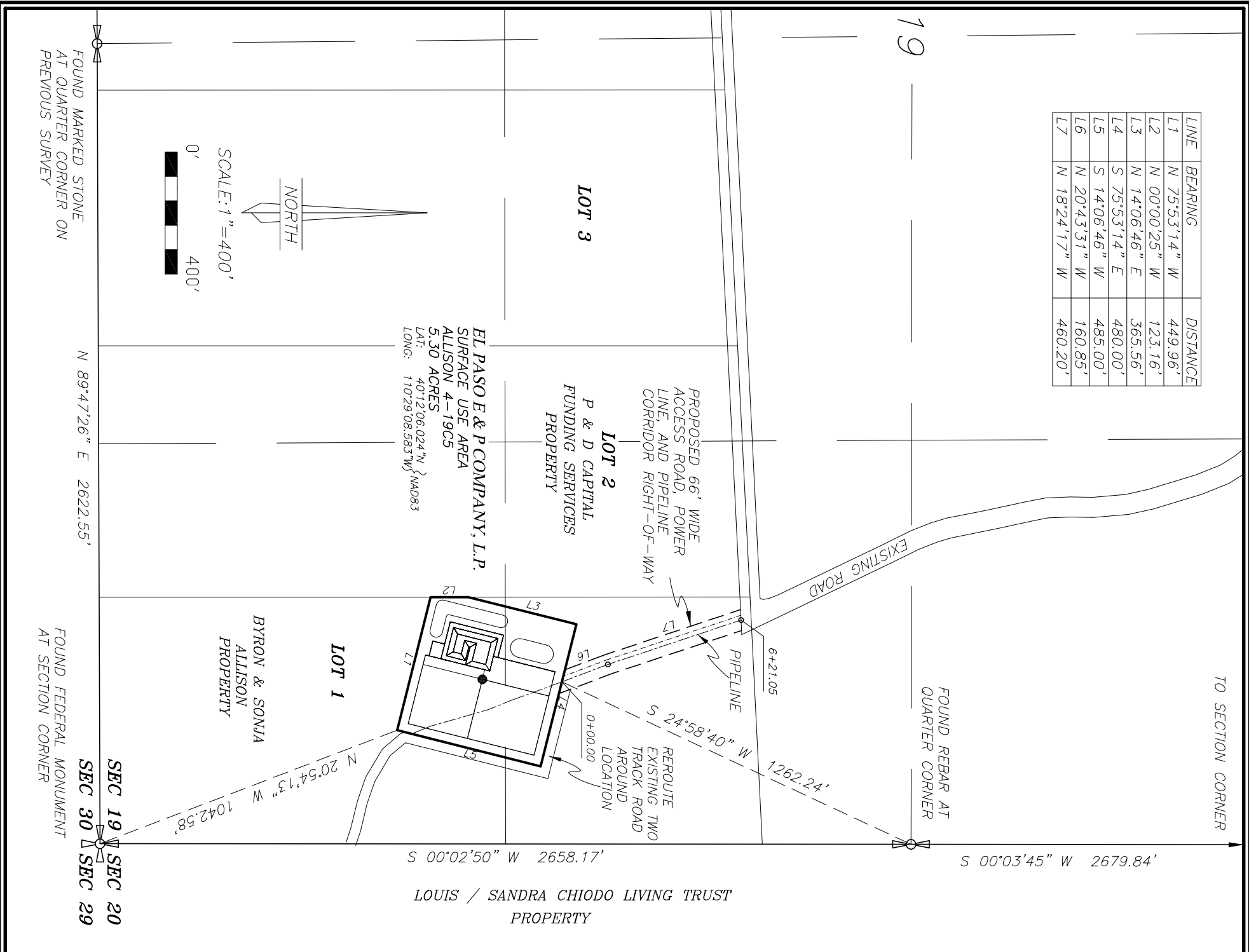
**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESNE, UTAH 84021  
(435) 738-5352

REV 25 JUN 2012 01-128-277

**RECEIVED: Sep. 18, 2012**





LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE  
CORRIDOR RIGHT-OF-WAY SURVEY FOR  
**EL PASO E&P COMPANY, L.P.**  
**ALLISON 4-19C5**  
SECTION 19, T3S, R5W, U.S.B.&M.  
DUCHESNE COUNTY, UTAH

USE AREA BOUNDARY

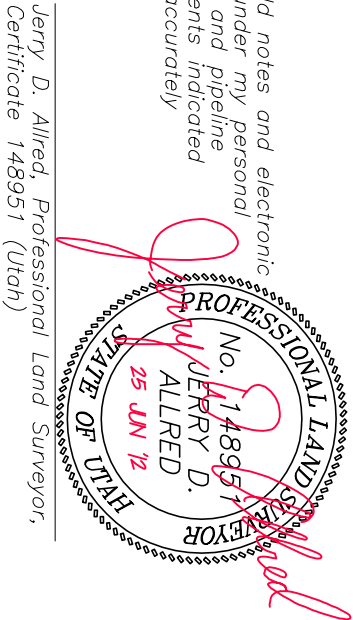
Commencing at the Southeast Corner of Section 19, Township 3 South, Range 5 West of the Uintah Special Base and Meridian;  
Thence North 20°54'13" West 1042.58 feet to the TRUE POINT OF BEGINNING;  
Thence North 75°53'14" West 449.96 feet to the West line of Lot 1, Golden Eagle Subdivision;  
Thence North 00°00'25" West 123.16 feet along said West line;  
Thence North 14°06'46" East 365.56 feet;  
Thence South 75°53'14" East 480.00 feet;  
Thence South 14°06'46" West 485.00 feet to the TRUE POINT OF BEGINNING, containing 5.30 acres.

ACCESS ROAD, POWER LINE, AND PIPELINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 66 feet wide access road, power line and pipeline corridor right-of-way over parts of Section 19, Township 3 South, Range 5 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows:  
Commencing at the East Quarter Corner of said Section 19;  
Thence South 24°58'40" West 1262.24 feet to the TRUE POINT OF BEGINNING, said point being on the North line of the EP Energy E&P Co. Allison 4-19C5 well location;  
Thence North 20°43'31" West 160.85;  
Thence North 18°24'17" West 460.20 feet to the South line of an existing road. Said right-of-way being 621.05 feet in length, with the sidelines being shortened or elongated to intersect the use boundary line of said location and the existing road right-of-way line.

SURVEYOR'S CERTIFICATE

This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area and access road, power line, and pipeline corridor right-of-way shown hereon, and that the monuments indicated were found or set during said survey, and that this plat accurately represents said survey to the best of my knowledge.



Jerry D. Allred, Professional Land Surveyor,  
Certificate 148951 (Utah)

THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT A CONTROL POINT LOCATED AT LAT 40°13'50.440" N AND LONG 110°29'48.258" W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

	<b>JERRY D. ALLRED AND ASSOCIATES</b> SURVEYING CONSULTANTS 1235 NORTH 700 EAST--P.O. BOX 975 DUCHESNE, UTAH 84021 (435) 738-5352
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## LEGEND:

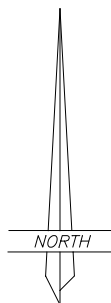


PROPOSED WELL LOCATION

01-128-277

**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESTER, UTAH 84021  
(435) 738-5352



**EL PASO E & P COMPANY, L.P.**

ALLISON 4-19C5

SECTION 19, T3S, R5W, U.S.B.&M.

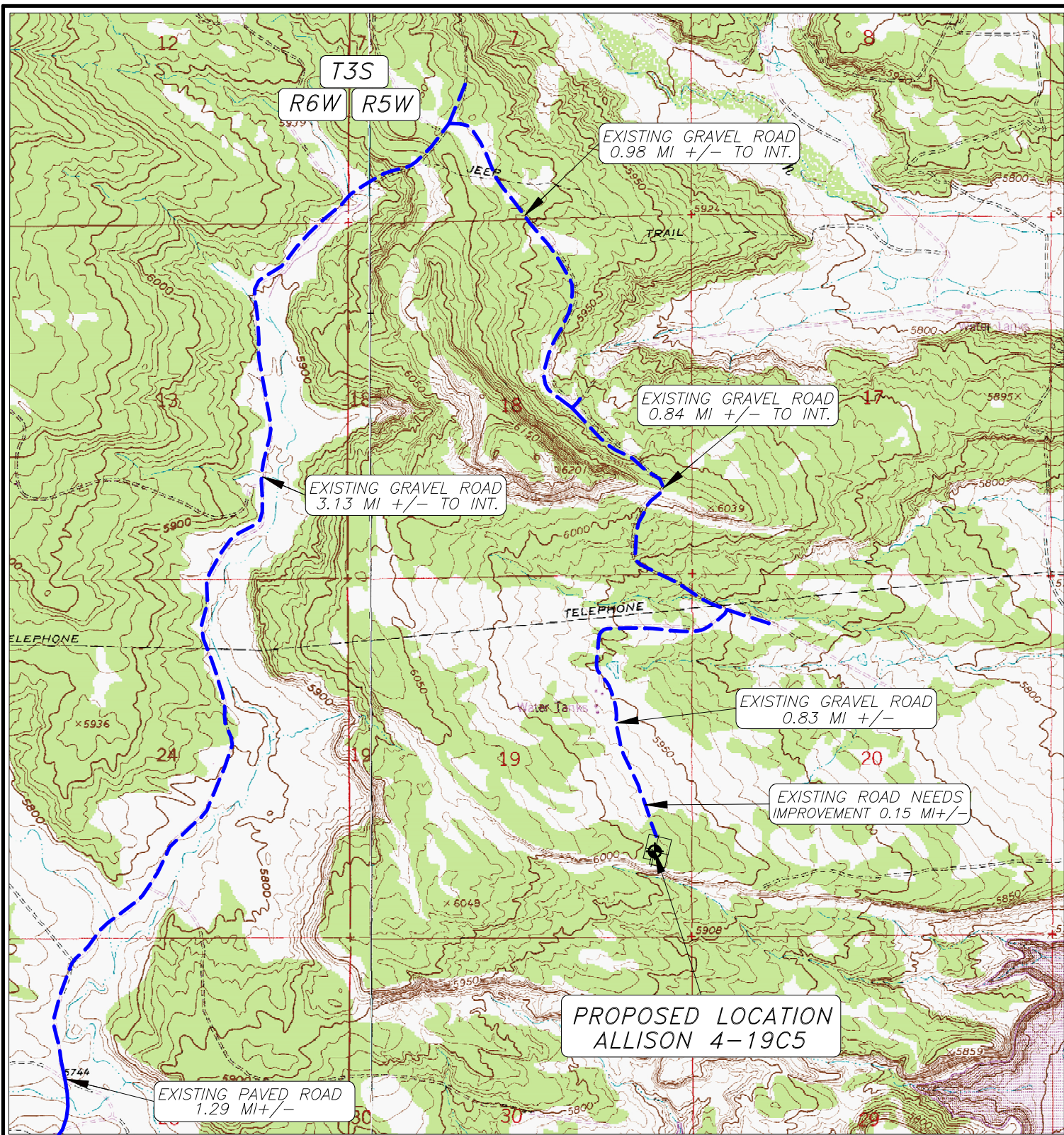
1255' FSL 540' FEL

**TOPOGRAPHIC MAP "A"**





SCALE: 1"=10,000'

REV 25 JUN 2012

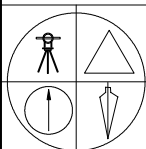
**RECEIVED: Sep. 18, 2012**



## LEGEND:

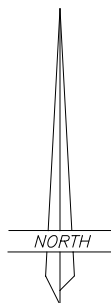
-  PROPOSED WELL LOCATION
-  PROPOSED ACCESS ROAD
-  EXISTING GRAVEL ROAD
-  EXISTING PAVED ROAD

01-128-277



**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESTER, UTAH 84021  
(435) 738-5352



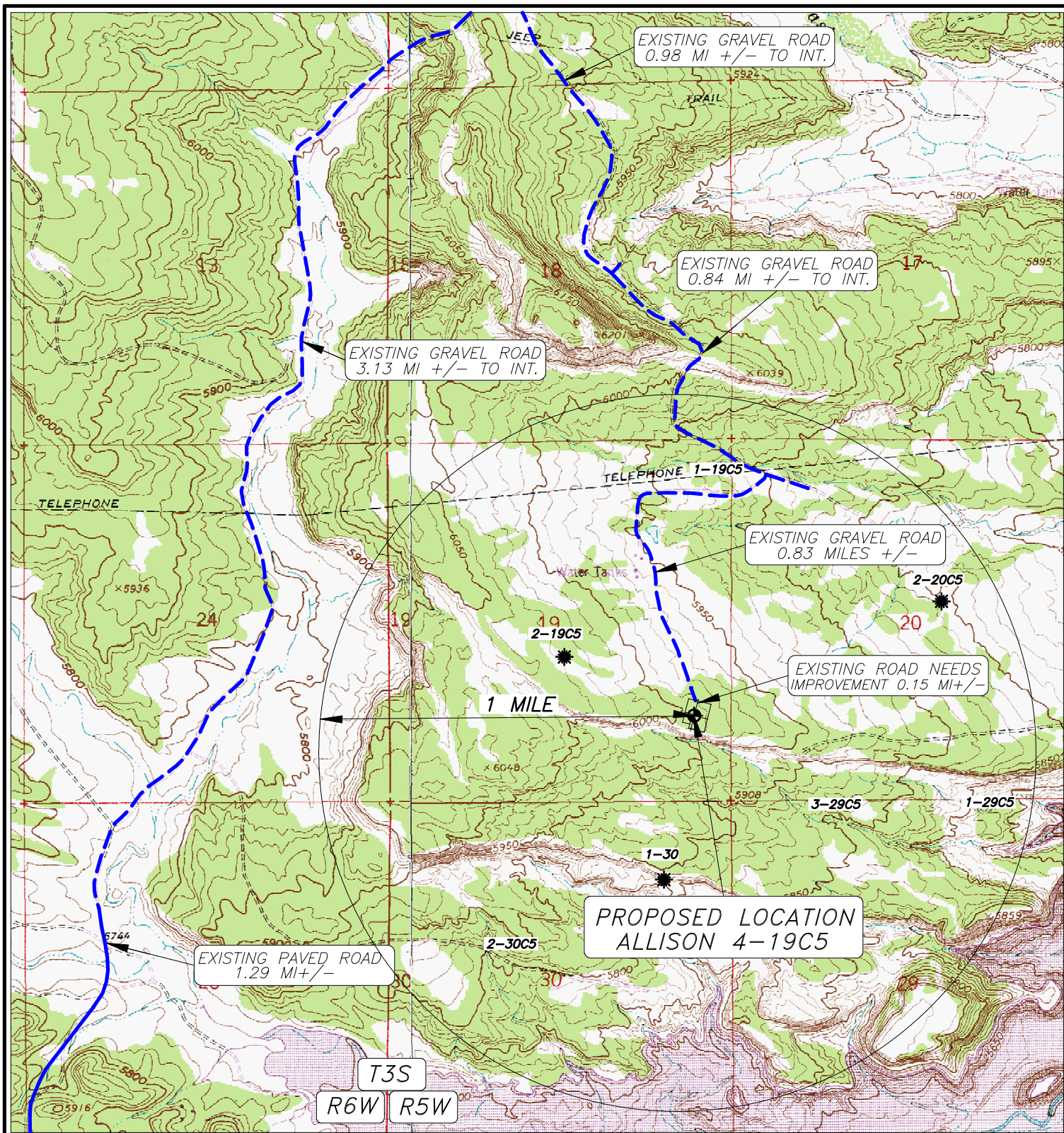
**EL PASO E & P COMPANY, L.P.**

ALLISON 4-19C5  
SECTION 19, T3S, R5W, U.S.B.&M.  
1255' FSL 540' FEL

**TOPOGRAPHIC MAP "B"**

SCALE: 1"=2000'  
REV 25 JUN 2012

**RECEIVED: Sep. 18, 2012**





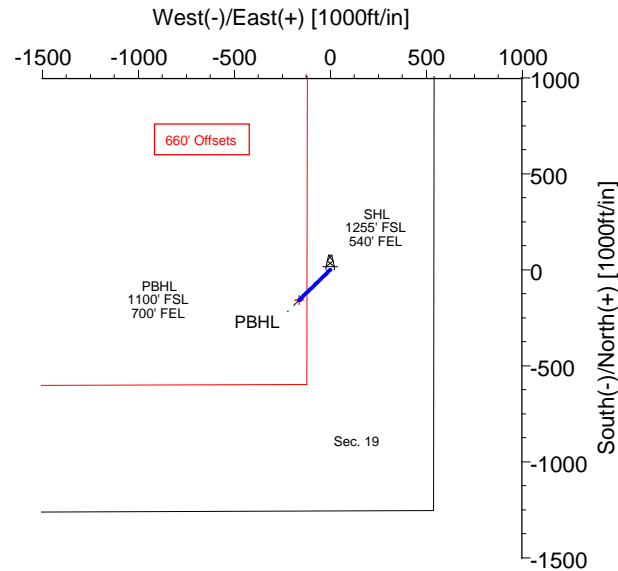
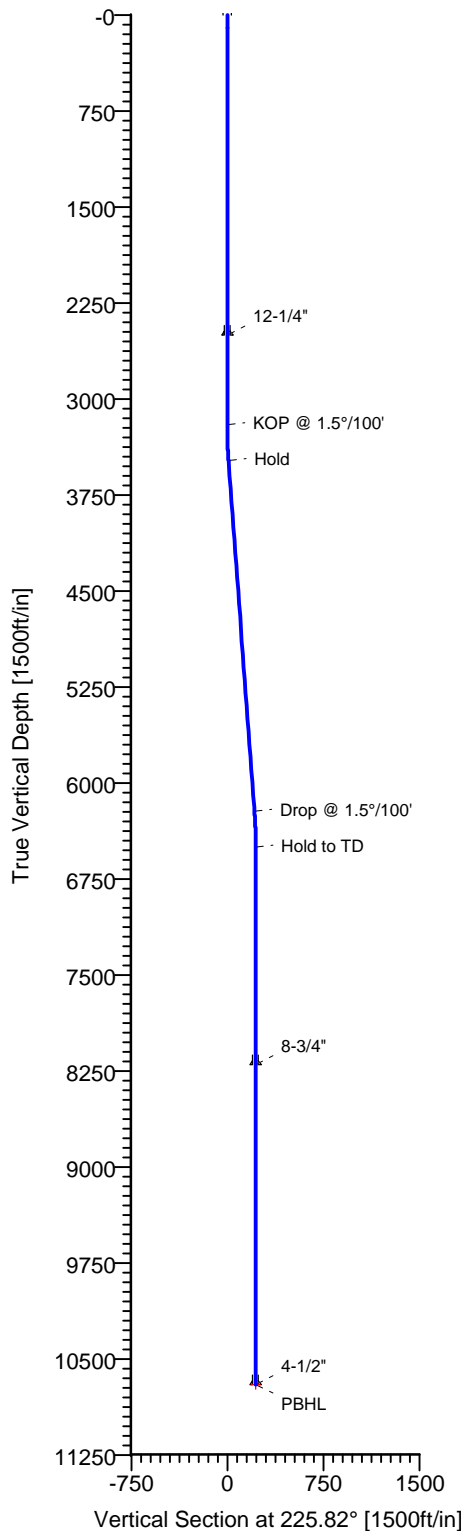
# EP Energy

Field: Duchesne Co, UT  
Site: Allison 4-19C5  
Well: 4-19C5  
Wellpath: OH  
Plan: Plan #1



Azimuths to True North  
Magnetic North: 11.35°

Magnetic Field  
Strength: 522.5nT  
Dip Angle: 65.81°  
Date: 9/18/2012  
Model: IGRF2010



## SITE DETAILS

Allison 4-19C5  
Sec. 19-T3S-R5W  
540' FEL & 1255' FSL

Site Centre Latitude: 40°12'06.024N  
Longitude: 110°29'08.583W

Ground Level: 5994.00  
Positional Uncertainty: 0.00  
Convergence: 0.65

## WELLPATH DETAILS

OH			
Rig:	SITE	6011.00ft	
Ref. Datum:			
V. Section Angle	Origin +N/-S	Origin +E/-W	Starting From TVD
225.82°	0.00	0.00	10700.00

## FIELD DETAILS

Duchesne Co, UT

Geodetic System: US State Plane Coordinate System 1983  
Ellipsoid: GRS 1980  
Zone: Utah, Central Zone  
Magnetic Model: IGRF2010  
System Datum: Mean Sea Level  
Local North: True North

## TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	10700.00	-155.52	-160.06	7243648.60	1923559.97	Point

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	225.82	0.00	0.00	0.00	0.00	0.00	-0.00	
2	3200.00	0.00	225.82	3200.00	0.00	0.00	0.00	225.82	-0.00	
3	3481.96	4.23	225.82	3481.70	-7.25	-7.46	1.50	225.82	10.40	
4	6226.03	4.23	225.82	6218.30	-148.27	-152.60	0.00	0.00	212.77	
5	6507.98	0.00	225.82	6500.00	-155.52	-160.06	1.50	180.00	223.18	
6	10707.98	0.00	225.82	10700.00	-155.52	-160.06	0.00	225.82	223.18	PBHL

# Ryan Directional Services

## Planning Report

<b>Company:</b> EP Energy <b>Field:</b> Duchesne Co, UT <b>Site:</b> Allison 4-19C5 <b>Well:</b> 4-19C5 <b>Wellpath:</b> OH	<b>Date:</b> 9/18/2012 <b>Co-ordinate(NE) Reference:</b> Site: Allison 4-19C5, True North <b>Vertical (TVD) Reference:</b> SITE 6011.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,225.82Azi) <b>Plan:</b> Plan #1	<b>Page:</b> 1
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**Field:** Duchesne Co, UT

**Map System:** US State Plane Coordinate System 1983  
**Geo Datum:** GRS 1980  
**Sys Datum:** Mean Sea Level

**Map Zone:** Utah, Central Zone  
**Coordinate System:** Site Centre  
**Geomagnetic Model:** IGRF2010

**Site:** Allison 4-19C5  
 Sec. 19-T3S-R5W  
 540' FEL & 1255' FSL

<b>Site Position:</b>	<b>Northing:</b> 7243805.92 ft	<b>Latitude:</b> 40 12 6.024 N	
<b>From:</b> Geographic	<b>Easting:</b> 1923718.26 ft	<b>Longitude:</b> 110 29 8.583 W	
<b>Position Uncertainty:</b> 0.00 ft		<b>North Reference:</b> True	
<b>Ground Level:</b> 5994.00 ft		<b>Grid Convergence:</b> 0.65 deg	

**Well:** 4-19C5

**Slot Name:**

<b>Well Position:</b> +N/-S 0.00 ft	<b>Northing:</b> 7243805.92 ft	<b>Latitude:</b> 40 12 6.024 N	
+E/-W 0.00 ft	<b>Easting:</b> 1923718.26 ft	<b>Longitude:</b> 110 29 8.583 W	
<b>Position Uncertainty:</b> 0.00 ft			

**Wellpath:** OH

<b>Current Datum:</b> SITE	<b>Height</b> 6011.00 ft	<b>Drilled From:</b> Surface	
<b>Magnetic Data:</b> 9/18/2012		<b>Tie-on Depth:</b> 0.00 ft	
<b>Field Strength:</b> 52215 nT		<b>Above System Datum:</b> Mean Sea Level	
<b>Vertical Section:</b> Depth From (TVD)	+N/-S	<b>Declination:</b> 11.35 deg	
ft	ft	<b>Mag Dip Angle:</b> 65.81 deg	
		<b>+E/-W</b>	<b>Direction</b>
		ft	deg
10700.00	0.00	0.00	225.82

**Plan:** Plan #1

**Date Composed:** 9/18/2012  
**Version:** 1  
**Tied-to:** From Surface

**Principal:** Yes

### Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	225.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	225.82	3200.00	0.00	0.00	0.00	0.00	0.00	225.82	
3481.96	4.23	225.82	3481.70	-7.25	-7.46	1.50	1.50	0.00	225.82	
6226.03	4.23	225.82	6218.30	-148.27	-152.60	0.00	0.00	0.00	0.00	
6507.98	0.00	225.82	6500.00	-155.52	-160.06	1.50	-1.50	0.00	180.00	
10707.98	0.00	225.82	10700.00	-155.52	-160.06	0.00	0.00	0.00	225.82	PBHL

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	225.82	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	
100.00	0.00	225.82	100.00	0.00	0.00	-0.00	0.00	0.00	0.00	
200.00	0.00	225.82	200.00	0.00	0.00	-0.00	0.00	0.00	0.00	
300.00	0.00	225.82	300.00	0.00	0.00	-0.00	0.00	0.00	0.00	
400.00	0.00	225.82	400.00	0.00	0.00	-0.00	0.00	0.00	0.00	
500.00	0.00	225.82	500.00	0.00	0.00	-0.00	0.00	0.00	0.00	
600.00	0.00	225.82	600.00	0.00	0.00	-0.00	0.00	0.00	0.00	
700.00	0.00	225.82	700.00	0.00	0.00	-0.00	0.00	0.00	0.00	
800.00	0.00	225.82	800.00	0.00	0.00	-0.00	0.00	0.00	0.00	
900.00	0.00	225.82	900.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1000.00	0.00	225.82	1000.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1100.00	0.00	225.82	1100.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1200.00	0.00	225.82	1200.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1300.00	0.00	225.82	1300.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1400.00	0.00	225.82	1400.00	0.00	0.00	-0.00	0.00	0.00	0.00	

# Ryan Directional Services

## Planning Report

<b>Company:</b> EP Energy <b>Field:</b> Duchesne Co, UT <b>Site:</b> Allison 4-19C5 <b>Well:</b> 4-19C5 <b>Wellpath:</b> OH	<b>Date:</b> 9/18/2012 <b>Co-ordinate(NE) Reference:</b> Site: Allison 4-19C5, True North <b>Vertical (TVD) Reference:</b> SITE 6011.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,225.82Azi) <b>Plan:</b> Plan #1	<b>Page:</b> 2
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**Survey**

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1500.00	0.00	225.82	1500.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1600.00	0.00	225.82	1600.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1700.00	0.00	225.82	1700.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1800.00	0.00	225.82	1800.00	0.00	0.00	-0.00	0.00	0.00	0.00	
1900.00	0.00	225.82	1900.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2000.00	0.00	225.82	2000.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2100.00	0.00	225.82	2100.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2200.00	0.00	225.82	2200.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2300.00	0.00	225.82	2300.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2400.00	0.00	225.82	2400.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2500.00	0.00	225.82	2500.00	0.00	0.00	-0.00	0.00	0.00	0.00	12-1/4"
2600.00	0.00	225.82	2600.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2700.00	0.00	225.82	2700.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2800.00	0.00	225.82	2800.00	0.00	0.00	-0.00	0.00	0.00	0.00	
2900.00	0.00	225.82	2900.00	0.00	0.00	-0.00	0.00	0.00	0.00	
3000.00	0.00	225.82	3000.00	0.00	0.00	-0.00	0.00	0.00	0.00	
3100.00	0.00	225.82	3100.00	0.00	0.00	-0.00	0.00	0.00	0.00	
3200.00	0.00	225.82	3200.00	0.00	0.00	-0.00	0.00	0.00	0.00	KOP @ 1.5°/100'
3300.00	1.50	225.82	3299.99	-0.91	-0.94	1.31	1.50	1.50	0.00	
3400.00	3.00	225.82	3399.91	-3.65	-3.75	5.23	1.50	1.50	0.00	
3481.96	4.23	225.82	3481.70	-7.25	-7.46	10.40	1.50	1.50	0.00	Hold
3500.00	4.23	225.82	3499.69	-8.18	-8.41	11.73	0.00	0.00	0.00	
3600.00	4.23	225.82	3599.42	-13.32	-13.70	19.11	0.00	0.00	0.00	
3700.00	4.23	225.82	3699.15	-18.45	-18.99	26.48	0.00	0.00	0.00	
3800.00	4.23	225.82	3798.88	-23.59	-24.28	33.86	0.00	0.00	0.00	
3900.00	4.23	225.82	3898.61	-28.73	-29.57	41.23	0.00	0.00	0.00	
4000.00	4.23	225.82	3998.33	-33.87	-34.86	48.61	0.00	0.00	0.00	
4100.00	4.23	225.82	4098.06	-39.01	-40.15	55.98	0.00	0.00	0.00	
4200.00	4.23	225.82	4197.79	-44.15	-45.44	63.36	0.00	0.00	0.00	
4300.00	4.23	225.82	4297.52	-49.29	-50.73	70.73	0.00	0.00	0.00	
4400.00	4.23	225.82	4397.24	-54.43	-56.02	78.11	0.00	0.00	0.00	
4500.00	4.23	225.82	4496.97	-59.57	-61.31	85.48	0.00	0.00	0.00	
4600.00	4.23	225.82	4596.70	-64.71	-66.60	92.86	0.00	0.00	0.00	
4700.00	4.23	225.82	4696.43	-69.85	-71.89	100.23	0.00	0.00	0.00	
4800.00	4.23	225.82	4796.15	-74.99	-77.18	107.61	0.00	0.00	0.00	
4900.00	4.23	225.82	4895.88	-80.13	-82.47	114.98	0.00	0.00	0.00	
5000.00	4.23	225.82	4995.61	-85.27	-87.75	122.36	0.00	0.00	0.00	
5100.00	4.23	225.82	5095.34	-90.40	-93.04	129.73	0.00	0.00	0.00	
5200.00	4.23	225.82	5195.07	-95.54	-98.33	137.11	0.00	0.00	0.00	
5300.00	4.23	225.82	5294.79	-100.68	-103.62	144.48	0.00	0.00	0.00	
5400.00	4.23	225.82	5394.52	-105.82	-108.91	151.86	0.00	0.00	0.00	
5500.00	4.23	225.82	5494.25	-110.96	-114.20	159.23	0.00	0.00	0.00	
5600.00	4.23	225.82	5593.98	-116.10	-119.49	166.61	0.00	0.00	0.00	
5700.00	4.23	225.82	5693.70	-121.24	-124.78	173.98	0.00	0.00	0.00	
5800.00	4.23	225.82	5793.43	-126.38	-130.07	181.36	0.00	0.00	0.00	
5900.00	4.23	225.82	5893.16	-131.52	-135.36	188.73	0.00	0.00	0.00	
6000.00	4.23	225.82	5992.89	-136.66	-140.65	196.11	0.00	0.00	0.00	
6100.00	4.23	225.82	6092.61	-141.80	-145.94	203.48	0.00	0.00	0.00	
6200.00	4.23	225.82	6192.34	-146.94	-151.23	210.86	0.00	0.00	0.00	
6226.03	4.23	225.82	6218.30	-148.27	-152.60	212.77	0.00	0.00	0.00	Drop @ 1.5°/100'
6300.00	3.12	225.82	6292.12	-151.58	-156.00	217.52	1.50	-1.50	0.00	
6400.00	1.62	225.82	6392.03	-154.46	-158.97	221.65	1.50	-1.50	0.00	
6507.98	0.00	225.82	6500.00	-155.52	-160.06	223.18	1.50	-1.50	0.00	Hold to TD
6600.00	0.00	225.82	6592.02	-155.52	-160.06	223.18	0.00	0.00	0.00	



# Ryan Directional Services

## Planning Report



<b>Company:</b> EP Energy	<b>Date:</b> 9/18/2012	<b>Time:</b> 10:39:57	<b>Page:</b> 3
<b>Field:</b> Duchesne Co, UT	<b>Co-ordinate(NE) Reference:</b> Site: Allison 4-19C5, True North		
<b>Site:</b> Allison 4-19C5	<b>Vertical (TVD) Reference:</b> SITE 6011.0		
<b>Well:</b> 4-19C5	<b>Section (VS) Reference:</b> Well (0.00N,0.00E,225.82Azi)		
<b>Wellpath:</b> OH	<b>Plan:</b> Plan #1		

### Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6700.00	0.00	225.82	6692.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
6800.00	0.00	225.82	6792.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
6900.00	0.00	225.82	6892.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7000.00	0.00	225.82	6992.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7100.00	0.00	225.82	7092.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7200.00	0.00	225.82	7192.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7300.00	0.00	225.82	7292.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7400.00	0.00	225.82	7392.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7500.00	0.00	225.82	7492.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7600.00	0.00	225.82	7592.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7700.00	0.00	225.82	7692.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7800.00	0.00	225.82	7792.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
7900.00	0.00	225.82	7892.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8000.00	0.00	225.82	7992.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8100.00	0.00	225.82	8092.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8200.00	0.00	225.82	8192.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8207.98	0.00	225.82	8200.00	-155.52	-160.06	223.18	0.00	0.00	0.00	8-3/4"
8300.00	0.00	225.82	8292.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8400.00	0.00	225.82	8392.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8500.00	0.00	225.82	8492.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8600.00	0.00	225.82	8592.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8700.00	0.00	225.82	8692.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8800.00	0.00	225.82	8792.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
8900.00	0.00	225.82	8892.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9000.00	0.00	225.82	8992.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9100.00	0.00	225.82	9092.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9200.00	0.00	225.82	9192.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9300.00	0.00	225.82	9292.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9400.00	0.00	225.82	9392.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9500.00	0.00	225.82	9492.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9600.00	0.00	225.82	9592.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9700.00	0.00	225.82	9692.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9800.00	0.00	225.82	9792.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
9900.00	0.00	225.82	9892.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10000.00	0.00	225.82	9992.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10100.00	0.00	225.82	10092.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10200.00	0.00	225.82	10192.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10300.00	0.00	225.82	10292.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10400.00	0.00	225.82	10392.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10500.00	0.00	225.82	10492.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10600.00	0.00	225.82	10592.02	-155.52	-160.06	223.18	0.00	0.00	0.00	
10707.98	0.00	225.82	10700.00	-155.52	-160.06	223.18	0.00	0.00	0.00	PBHL

### Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
PBHL -Plan hit target			10700.00	-155.52	-160.06	7243648.60	1923559.97	40	12	4.487 N	110	29	10.646 W

<b>Company:</b> EP Energy <b>Field:</b> Duchesne Co, UT <b>Site:</b> Allison 4-19C5 <b>Well:</b> 4-19C5 <b>Wellpath:</b> OH	<b>Date:</b> 9/18/2012 <b>Co-ordinate(NE) Reference:</b> Site: Allison 4-19C5, True North <b>Vertical (TVD) Reference:</b> SITE 6011.0 <b>Section (VS) Reference:</b> Well (0.00N,0.00E,225.82Azi) <b>Plan:</b> Plan #1	<b>Page:</b> 4
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**Casing Points**

MD ft	TVD ft	Diameter in	Hole Size in	Name
2500.00	2500.00	0.000	0.000	12-1/4"
8207.98	8200.00	0.000	0.000	8-3/4"
10707.98	10700.00	0.000	0.000	4-1/2"

**Annotation**

MD ft	TVD ft	
3200.00	3200.00	KOP @ 1.5°/100'
3481.96	3481.70	Hold
6226.03	6218.30	Drop @ 1.5°/100'
6507.98	6500.00	Hold to TD

August 28, 2012

VIA FACSIMILE (801) 359-3940

Mr. John Rogers  
Utah Division of Oil, Gas & Mining  
1594 West North Temple  
Salt Lake City, Utah 84116

RE: EP Energy E&P Company, L.P.'s Allison 4-19C5 Well  
Section 19, Township 3 South, Range 5 West  
Duchesne County, Utah

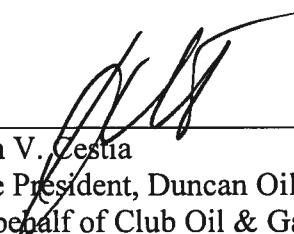
Dear Mr. Rogers,

Please be advised that EP Energy E&P Company, L.P. (EPE) has advised Club Oil & Gas, Ltd. of its need to obtain an exception location for its Allison 4-19C5 Well (the "Well") as the surface hole location of the Well is located 540' from the East line of Section 19, Township 3 South, Range 5 West and is therefore not in compliance with the applicable spacing rules.

Please be advised that Club Oil & Gas, Ltd., a working interest owner in Section 20, T3S, R5W, consents to and has no objections to EPE's exception location request for the Well. Should you have any questions, please contact me directly at \_\_\_\_\_.

Sincerely,

**CLUB OIL & GAS, LTD.**



\_\_\_\_\_  
John V. Cestia  
Vice President, Duncan Oil, Inc.  
On behalf of Club Oil & Gas, Ltd.

Cc: Lauren Williams  
EP Energy E&P Company, L.P.

August 28, 2012

VIA FACSIMILE (801) 359-3940

Mr. John Rogers  
Utah Division of Oil, Gas & Mining  
1594 West North Temple  
Salt Lake City, Utah 84116

RE: EP Energy E&P Company, L.P.'s Allison 4-19C5 Well  
Section 19, Township 3 South, Range 5 West  
Duchesne County, Utah

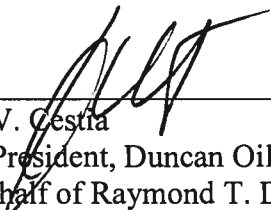
Dear Mr. Rogers,

Please be advised that EP Energy E&P Company, L.P. (EPE) has advised Raymond T. Duncan Oil of its need to obtain an exception location for its Allison 4-19C5 Well (the "Well") as the surface hole location of the Well is located 540' from the East line of Section 19, Township 3 South, Range 5 West and is therefore not in compliance with the applicable spacing rules.

Please be advised that Raymond T. Duncan Oil, a working interest owner in Section 20, T3S, R5W, consents to and has no objections to EPE's exception location request for the Well. Should you have any questions, please contact me directly at 303-757-3303.

Sincerely,

**RAYMOND T. DUNCAN OIL PROPERTIES, LTD.**

  
\_\_\_\_\_  
John V. Gesta  
Vice President, Duncan Oil, Inc.  
On behalf of Raymond T. Duncan Oil Properties, Ltd.

Cc: Lauren Williams  
EP Energy E&P Company, L.P.

August 28, 2012

VIA FACSIMILE (801) 359-3940

Mr. John Rogers  
Utah Division of Oil, Gas & Mining  
1594 West North Temple  
Salt Lake City, Utah 84116

RE: EP Energy E&P Company, L.P.'s Allison 4-19C5 Well  
Section 19, Township 3 South, Range 5 West  
Duchesne County, Utah

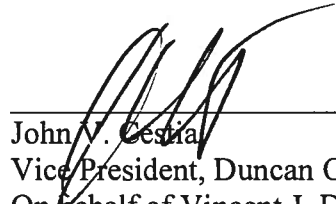
Dear Mr. Rogers,

Please be advised that EP Energy E&P Company, L.P. (EPE) has advised Vincent J. Duncan Trust of its need to obtain an exception location for its Allison 4-19C5 Well (the "Well") as the surface hole location of the Well is located 540' from the East line of Section 19, Township 3 South, Range 5 West and is therefore not in compliance with the applicable spacing rules.

Please be advised that Vincent J. Duncan Trust, a working interest owner in Section 20, T3S, R5W, consents to and has no objections to EPE's exception location request for the Well. Should you have any questions, please contact me directly at 303-757-3303.

Sincerely,

VINCENT J. DUNCAN TRUST



\_\_\_\_\_  
John V. Cestia  
Vice President, Duncan Oil, Inc.  
On behalf of Vincent J. Duncan Trust

Cc: Lauren Williams  
EP Energy E&P Company, L.P.

August 28, 2012

VIA FACSIMILE (801) 359-3940

Mr. John Rogers  
Utah Division of Oil, Gas & Mining  
1594 West North Temple  
Salt Lake City, Utah 84116

RE: EP Energy E&P Company, L.P.'s Allison 4-19C5 Well  
Section 19, Township 3 South, Range 5 West  
Duchesne County, Utah

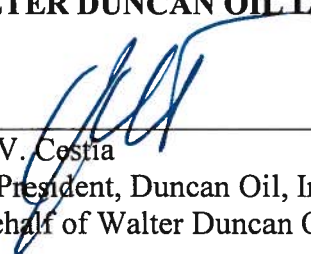
Dear Mr. Rogers,

Please be advised that EP Energy E&P Company, L.P. (EPE) has advised Walter Duncan Oil LLC of its need to obtain an exception location for its Allison 4-19C5 Well (the "Well") as the surface hole location of the Well is located 540' from the East line of Section 19, Township 3 South, Range 5 West and is therefore not in compliance with the applicable spacing rules.

Please be advised that Walter Duncan Oil LLC, a working interest owner in Section 20, T3S, R5W, consents to and has no objections to EPE's exception location request for the Well. Should you have any questions, please contact me directly at 303-757-3303.

Sincerely,

**WALTER DUNCAN OIL LLC**



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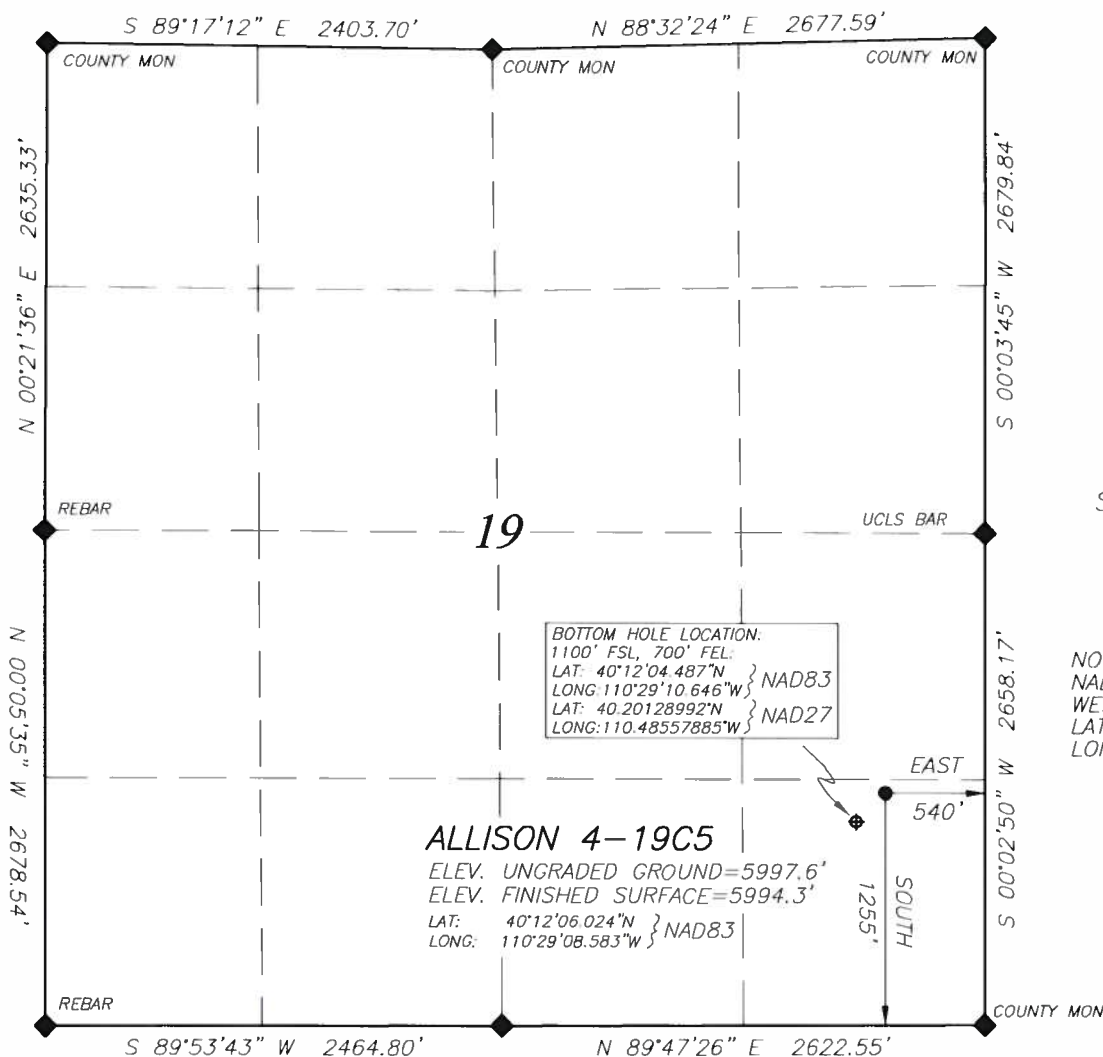
John V. Cestia  
Vice President, Duncan Oil, Inc.  
On behalf of Walter Duncan Oil LLC

Cc: Lauren Williams  
EP Energy E&P Company, L.P.

**EL PASO E & P COMPANY, L.P.**

WELL LOCATION

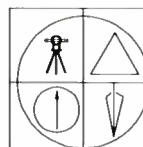
ALLISON 4-19C5

LOCATED IN THE SE $\frac{1}{4}$  OF THE SE $\frac{1}{4}$  OF  
SECTION 19, T3S, R5W, U.S.B.&M.  
DUCHESE COUNTY, UTAH**LEGEND AND NOTES**

- ◆ CORNER MONUMENTS FOUND AND USED BY THIS SURVEY
- THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS AS WAS THE U.S.G.S. MAP
- THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT
- THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT A CONTROL POINT LOCATED AT LAT 40°13'50.440"N AND LONG 110°29'48.258"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

BASIS OF ELEVATIONS: NAVD 88 DATUM USING  
THE UTAH REFERENCE NETWORK CONTROL SYSTEM

REV 22 AUG 2012 01-128-277

**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESE, UTAH 84021  
(435) 738-5352

CONFIDENTIAL

## DIVISION OF OIL, GAS AND MINING

### SPUDDING INFORMATION

Name of Company; EP ENERGY E&P COMPANY, L.P.

Well Name: ALLISON 4-19C5

Api No: 43-013-51466 Lease Type FEE

Section 19 Township 03S Range 05W County DUCHESNE

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

### SPUDDED:

Date 10/10/2012

Time

How DRY

**Drilling will Commence:**

Reported by WAYNE GARNER

Telephone # (435) 823-1490

Date 10/10/2012 Signed CHD

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Fee
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana, Houston, TX, 77002		<b>8. WELL NAME and NUMBER:</b> ALLISON 4-19C5
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1255 FSL 0540 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 19 Township: 03.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013514660000
<b>PHONE NUMBER:</b> 713 997-5038 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 11/26/2012	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 Well spud 10-10-12. Suspended operations.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 November 27, 2012

<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/26/2012	

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: EP Energy E&P Company, L.P. Operator Account Number: N 3850  
Address: 1001 Louisiana, Room 2730D  
city Houston  
state TX zip 77002 Phone Number: (713) 997-5038

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351500	Young 2-7C4		NWNW	7	3S	4W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	18824	11/7/2012		11/28/2012		
Comments: <u>GR-WS</u>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301351466	Allison 4-19C5		SESE	19	3S	5W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
A	99999	18827	10/10/2012		11/28/2012		
Comments: <u>GR-WS</u> <u>WSTC</u>							

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**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Maria S. Gomez

Name (Please Print)

Maria S. Gomez

Signature

Principle Regulatory Analyst

Title

11/21/2012

Date

**RECEIVED**

**NOV 28 2012**

Div. of Oil, Gas & Mining

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Fee
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana, Houston, TX, 77002		<b>8. WELL NAME and NUMBER:</b> ALLISON 4-19C5
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1255 FSL 0540 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 19 Township: 03.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013514660000
<b>PHONE NUMBER:</b> 713 997-5038 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 4/5/2013	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE   <input type="checkbox"/> CHANGE TO PREVIOUS PLANS   <input type="checkbox"/> CHANGE WELL STATUS   <input type="checkbox"/> DEEPEN   <input type="checkbox"/> OPERATOR CHANGE   <input type="checkbox"/> PRODUCTION START OR RESUME   <input type="checkbox"/> REPERFORATE CURRENT FORMATION   <input type="checkbox"/> TUBING REPAIR   <input type="checkbox"/> WATER SHUTOFF   <input type="checkbox"/> WILDCAT WELL DETERMINATION         </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING   <input type="checkbox"/> CHANGE TUBING   <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS   <input type="checkbox"/> FRACTURE TREAT   <input type="checkbox"/> PLUG AND ABANDON   <input type="checkbox"/> RECLAMATION OF WELL SITE   <input type="checkbox"/> SIDETRACK TO REPAIR WELL   <input type="checkbox"/> VENT OR FLARE   <input type="checkbox"/> SI TA STATUS EXTENSION   <input type="checkbox"/> OTHER         </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR   <input type="checkbox"/> CHANGE WELL NAME   <input type="checkbox"/> CONVERT WELL TYPE   <input type="checkbox"/> NEW CONSTRUCTION   <input type="checkbox"/> PLUG BACK   <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION   <input type="checkbox"/> TEMPORARY ABANDON   <input type="checkbox"/> WATER DISPOSAL   <input type="checkbox"/> APD EXTENSION           OTHER: <input style="width: 100%;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Well has been completed and on production. FINAL REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> April 05, 2013		
<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 4/5/2013	

## 1 General

### 1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

### 1.2 Well Information

Well	ALLISON 4-19C5		
Project	ALTAMONT FIELD	Site	ALLISON 4-19C5
Rig Name/No.	PRECISION DRILLING/404	Event	DRILLING LAND
Start Date	11/21/2012	End Date	12/20/2012
Spud Date/Time	11/25/2012	UWI	ALLISON 4-19C5
Active Datum	KB @5,974.0ft (above Mean Sea Level)		
Afe No./Description	156902/46968 / ALLISON 4-19C5		

## 2 Summary

### 2.1 Operation Summary

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
10/16/2012	6:00	6:00	24.00	DPDCOND	07		P	850.0	SET 40' NCONDUCTOR, 90' MOUSE HOLE & 803' 13-3/8" CSG. WATER FLOW @ 300'
11/22/2012	6:00	6:00	24.00	MIRU	01		P	850.0	MOVED 66% RIG, 10% RIGGED UP
11/23/2012	6:00	6:00	24.00	MIRU	01		P	850.0	85% RIG MOVED, 15% RIGGED UP
11/24/2012	6:00	6:00	24.00	MIRU	01		P	850.0	100% RIG MOVED, 60% RIGGED UP.
11/25/2012	6:00	23:30	17.50	MIRU	01		P	850.0	100% RIGGED UP. RIG ON DAY RATE @ 23:30 HRS. 10/24/2012.
	23:30	4:00	4.50	CASCOND	28		P	850.0	NU RISER & ROT HEAD. R/U FLOW LINE & GAS BUSTER.
	4:00	6:00	2.00	CASCOND	42		P	850.0	INSTALL SHAKER SCREENS. BUILD SPUD MUD. RU CHOKE LINES. TEST CHOKE MANIFOLD TO 250 PSI / 3000 PSI W/ 10 MIN PER TEST.
11/26/2012	6:00	7:30	1.50	CASCOND	28		P	803.0	FINISH N/U RISER, ROTATING HEAD, FLOW LINE.
	7:30	10:30	3.00	CASCOND	19		P	803.0	PJSM - R/U B&C QUICK TEST, SET TEST PLUG, TESTED ANNULAR, HCR VALVE / MANUAL VALVE, KILL LINE VALVES, TIW VALVE, MANUAL & HYD TD VALVES, DART VALVE TO 250 PSI / 3000 PSI W/ 10 MIN PER TEST. TESTED STAND PIPE & PUMP LINES TO 250 PSI / 4M PSI. TESTED CHOKE MANIFOLD TO 250 PSI / 3M PSI W/ 10 MIN PER TEST - NOTE: IN CHOKE MANIFOLD, HAD TWO VALVES LEAKED #12, #14 - REPAIRED BOTH VALES AND RE-TESETD BOTH 250 PSI LOW, 10 M PSI HIGH, AT 10 MINS, OK AFTER TESTING THE DIVERTER SYSTEM.
	10:30	13:00	2.50	CASCOND	14		P	803.0	LAY OUT AND CALIPER BHA.
	13:00	18:00	5.00	CASCOND	14		P	803.0	M/U BIT #1, ON HUNTING SFBH MM, P/U BHA TIH TO 687'.
	18:00	19:00	1.00	CASCOND	17		P	803.0	SLIP AND CUT 9 WRAPS OF DRILL LINE.
	19:00	20:00	1.00	CASCOND	15		P	803.0	C & C MUD. CIRCULATE FOR CSG TEST.
	20:00	23:00	3.00	CASCOND	32		P	803.0	TEST 13 3/8" CSG TO 1,000 PSI FOR 30 MINS, OK. DRILL OUT SHOE TRACK.
	23:00	0:30	1.50	DRLSURF	07		P	803.0	DRILL 803' - 908'.
	0:30	1:00	0.50	DRLSURF	60		N	908.0	ATTEMPT TO TAKE SURVEY. NES TOOL NOT PULSING.
	1:00	4:30	3.50	DRLSURF	60		N	908.0	PUMP SLUG & TOOH FOR FAILED SWD TOOL.
11/27/2012	4:30	6:00	1.50	DRLSURF	60		N	908.0	CHANGE OUT SWD TOOL.
	6:00	8:00	2.00	DRLSURF	60		N	908.0	M/U BHA & TIH.
	8:00	14:00	6.00	DRLSURF	07		P	908.0	DRILL 908' - 1,395'
	14:00	14:30	0.50	DRLSURF	12		P	1,395.0	SERVICE RIG & TDU

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD From (ft)	Operation
11/28/2012	14:30 18:00	3.50	DRLSURF	07		P	1,395.0	DRILL 1,395' - 1,443' ( HOOKLOAD SENSOR INOPERATIVE. DRL W/ DIFF PRESS & WO PASON )
	18:00 0:30	6.50	DRLSURF	07		P	1,443.0	DRILL 1,443' - 1,575'.
	0:30 1:30	1.00	DRLSURF	45		N	1,575.0	CHANGE OUT DISCHARGE VALVES IN #2 PUMP.
	1:30 2:30	1.00	DRLSURF	07		P	1,598.0	DRILL 1,575' - 1,598'.
	2:30 4:00	1.50	DRLSURF	45		N	1,598.0	CHANGE OUT SWAB & LINER IN #1 PUMP.
	4:00 6:00	2.00	DRLSURF	07		P	1,598.0	DRILL 1,598' - 1,615'.
	6:00 10:00	4.00	DRLSURF	13		P	1,615.0	BACK REAM OUT TO CSG SHOE. TOO H.
	10:00 12:30	2.50	DRLSURF	13		P	1,615.0	CHANGE OUT BIT, M/M, TIH TO SHOE.
	12:30 14:00	1.50	DRLSURF	17		P	1,615.0	SLIP & CUT DRILL LINE.
	14:00 15:30	1.50	DRLSURF	13		P	1,615.0	TIH TO 1,615'.
	15:30 22:00	6.50	DRLSURF	07		P	1,615.0	DRILL 1,615' - 1,932'.
	22:00 22:30	0.50	DRLSURF	52		N	1,932.0	LOST TOTAL RETURNS AT 1,932'. PUMPED 80 BBLS OF 44 PPB LCM PILLS, AND 20 BBLS OF 64 PPB LCM PILLS, NO RETURNS.
	22:30 23:00	0.50	DRLSURF	52		N	1,932.0	PULL 2 STANDS OFF BOTTOM.
	23:00 0:00	1.00	DRLSURF	52		N	1,932.0	PUMP & DISPLACED 20 BBLS OF 64 PPB LCM PILLS, NO RETURNS TO SURFACE.
	0:00 0:30	0.50	DRLSURF	52		N	1,932.0	ATTEMPT TO CIRC, PUMPED 62 BBLS, NO RETURNS.
	0:30 1:00	0.50	DRLSURF	52		N	1,932.0	TOOH TO SHOE 820'.
	1:00 2:30	1.50	DRLSURF	52		N	1,932.0	MIX 165 BBL 65 PPB LCM PILL, BUILD MUD VOLUME.
	2:30 3:30	1.00	DRLSURF	52		N	1,932.0	PUMP & DISPLACED 109 BBLS 65 PPB LCM PILL, TOTAL LOSSES SINCE TOTAL CIR LOSS AT 1,932' TO THE HOLE 679 BBLS, NO RETURNS.
	3:30 6:00	2.50	DRLSURF	52		N	1,932.0	MIX 165 BBL 65 PPB LCM PILL, BUILD MUD VOLUME.
11/29/2012	6:00 7:30	1.50	DRLSURF	52		N	1,932.0	PUMP & DISPLACE 100 BBLS OF 65 PPB LCM PILL. NO RETURNS.
	7:30 10:00	2.50	DRLSURF	52		N	1,932.0	TOOH & L/D NES SURVEY TOOL, CHECK M/M BIT, OK.
	10:00 11:30	1.50	DRLSURF	52		N	1,932.0	TIH TO 1,740'.
	11:30 13:30	2.00	DRLSURF	52		N	1,932.0	BUILD 80 BBLS OF 80# / BBL STOPPIT LCM PILL - PUMPED SAME OUT END OF BIT AT 1,930' - LOST 25 BBLS WHILE PUMPING AND DISPLACING SAME.
	13:30 14:30	1.00	DRLSURF	52		N	1,932.0	PULL BACK UP INTO SHOE AT 820'.
	14:30 15:30	1.00	DRLSURF	52		N	1,932.0	ATTEMPTED TO PUMP DOWN DRILL STRING, STRING PRESSURED UP TO 2,200 PSI.
	15:30 19:30	4.00	DRLSURF	52		N	1,932.0	TOOH - FOUND LCM IN SHOCK SUB AND TOP OF MUD MOTOR. L/O BOTH.
	19:30 22:30	3.00	DRLSURF	52		N	1,932.0	P/U MOTOR & SHOCK SUB. TIH TO SHOE. BREAK CIRC EVERY 2 STANDS TO BOTTOM. GOOD RETURNS.
	22:30 1:30	3.00	DRLSURF	07		P	1,932.0	DRILL 1,932' - 1,985'.
	1:30 3:00	1.50	DRLSURF	52		N	1,985.0	LOOSING MUD @ 160 BBLS/HR. P/U PUMP LCM & 3 - 65 PPB LCM PILLS. SHAKERS 75% BY PASSED.
11/30/2012	3:00 6:00	3.00	DRLSURF	07		P	1,985.0	DRILL 1,985' - 2,039'.
	6:00 9:00	3.00	DRLSURF	07		P	2,039.0	DRILL 2,039' - 2,097'.
	9:00 10:00	1.00	DRLSURF	15		P	2,097.0	C & C MUD & BUILD VOLUME.
	10:00 11:00	1.00	DRLSURF	07		P	2,097.0	DRILL 2,097' - 2,116'.
	11:00 11:30	0.50	DRLSURF	12		P	2,116.0	SERVICE RIG & TDU.
	11:30 5:30	18.00	DRLSURF	07		P	2,116.0	DRILL 2,116' - 2,393'.
12/1/2012	5:30 6:00	0.50	DRLSURF	15		P	2,393.0	C&C MUD. BUILD SLUG.
	6:00 9:00	3.00	DRLSURF	13		P	2,393.0	TOOH, C/O BIT, CHECK M/M, OK - M/U BIT #3 .
	9:00 11:30	2.50	DRLSURF	13		P	2,393.0	TIH BREAK CIR EVERY 900' - NOTE HAD 35K OVER PULL AT 2,020' ON TRIP OUT - SLICK TIH.
	11:30 13:00	1.50	DRLSURF	07		P	2,393.0	DRILL 2,393' - 2,447'. LOSSES TO HOLE INCREASED F. 57 BPH TO 450 BPH.
	13:00 16:30	3.50	DRLSURF	15		P	2,447.0	BUILD MUD VOLUME.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD From (ft)	Operation
	16:30 18:00	1.50	DRLSURF	15		P	2,447.0	BRING AIR ON AT 200 SCFM WITH 400 GPM, ADJUSTED GPM TO 600 GPM, REDUCED AIR TO 150 SCFM TO BALANCE OUT FLOW.
	18:00 22:30	4.50	DRLSURF	07		P	2,447.0	DRILL 2,447' - 2,770'. ( PUMPING 612 GPM W/ 150 SCFM )
	22:30 23:00	0.50	DRLSURF	12		P	2,770.0	SERVICE RIG & TDU.
	23:00 6:00	7.00	DRLSURF	07		P	2,770.0	DRILL 2,770' - 3,084'. ( PUMPING 612 GPM W/ 300 SCFM )
12/2/2012	6:00 14:00	8.00	DRLSURF	07		P	3,084.0	DRILL 3,084' - 3,387' - LOST ALL RETURNS TO SURFACE - DRILLIED AHEAD AFTER INCREASING THE AIR FROM 300 SCFM TO 400 SCFM - DRILLED 3,387' - 3,399' WITH OUT RETURNS.
	14:00 16:00	2.00	DRLSURF	15		P	3,399.0	BUILD VOLUME - PUMPED 576 GPM W/ 400 SCFM - 17 MINUTES INTO PUMPING HAD RETURNS COMING BACK TO SURFACE.
	16:00 16:30	0.50	DRLSURF	07		P	3,399.0	DRILL 3,399' - 3,423'. ( PUMPING 400 SCFM AIR ).
	16:30 17:00	0.50	DRLSURF	12		P	3,423.0	SERVICE RIG & TDU.
	17:00 22:30	5.50	DRLSURF	07		P	3,423.0	DRILL 3,423' - 3,700'. ( PUMPING 300 SCFM AIR ).
	22:30 23:00	0.50	DRLSURF	15		P	3,700.0	CIRC B/U. PUMP GELLED LCM SWEEP.
	23:00 3:00	4.00	DRLSURF	13		P	3,700.0	WIPER TRIP 31 STDS TO SHOE @ 803'.
	3:00 4:30	1.50	DRLSURF	15		P	3,700.0	ESTABLISH CIRC & CIRC SWEEP AROUND. ( 300 SCFM AIR ).
	4:30 6:00	1.50	DRLSURF	13		P	3,700.0	TOOH TO RUN 9-5/8" CSG.
	6:00 9:00	3.00	DRLSURF	13		P	3,700.0	TOOH - L/D BHA, BIT #3.
12/3/2012	9:00 18:30	9.50	CASSURF	24		P	3,700.0	R/U FRANKS CSG CREW & RUN 80 JT'S 9-5/8" 40# N-80 LTC CSG. - UNABLE TO CIRCULATE - LANDED FS @ 3,700" & FC @ 3,664' - R/U DOWN FRANKS CSG CREW.
	18:30 20:30	2.00	CASSURF	25		P	3,700.0	PJSM - INSTALL CMT HEAD, PUMPED CAPACITY OF CSG WITH MUD ( 275 BBLs ) UNABLE TO ESTABLISH CIRCULATION.
	20:30 23:00	2.50	CASSURF	25		P	3,700.0	PJSA. RU HES CMT LINES. TESTED LINES TO 5M PSI. PUMPED 50 BBLs FW, 530 SX (299 BBL) 11 PPG 3.17 YLD 35/65 POZ G CMT & 195 SX (46 BBL) 14.2 PPG 1.33 YLD HALCO LIGHT PREM CMT.
	23:00 1:30	2.50	CASSURF	25		P	3,700.0	RUN 1" PIPE TO 400'. PERFORMED TOP OUT #1. PUMPED 150 SX (30 BBL) 15.8 PPG 1.15 YLD PREM CMT + 2% CACL2. NO RETURNS TO SURFACE.
	1:30 4:30	3.00	CASSURF	26		P	3,700.0	L/D 400' 1" PIPE. WOC. RD CMT HEAD. PREPAIR TO N/D DIVERTER STACK.
	4:30 6:00	1.50	CASSURF	25		P	3,700.0	RUN 1" PIPE TO 400'. TO PERFORM TOP OUT #2.
	6:00 7:00	1.00	CASSURF	25		P	3,700.0	PERFORM TOP OUT #2. PUMPED 450 SX ( 90 BBLs ) 15.8 PPG 1.17 YLD PREM CMT + 3% CACL2. NO RETURNS.
12/4/2012	7:00 14:00	7.00	CASSURF	26		P	3,700.0	L/D 400' 1" PIPE. WOC. PREPAIR TO N/D DIVERTER STACK.
	14:00 15:30	1.50	CASSURF	25		P	3,700.0	PERFORM TOP OUT #3. PUMPED 200 SX ( 41 BBLs ) 15.8 PPG 1.17 YLD PREM CMT + 2% CACL2. 32 BBLs RETURN TO SURFACE.
	15:30 16:30	1.00	CASSURF	26		P	3,700.0	WOC. MONITOR FLUID LEVE, NO FALL BACK. R/D HES.
	16:30 19:00	2.50	CASSURF	29		P	3,700.0	LIFT DIVERTER STACK. ROUGH CUT 9-5/8" CSG & L/D SAME. ND DIVERTER STACK. CUT OFF & REMOVE 13 3/8" x 13 3/8" 3M STARTER HEAD.
	19:00 23:30	4.50	CASSURF	27		P	3,700.0	MAKE FINAL CUT ON 9-5/8" CSG. INSTALL 9-5/8" x 11" 5M SOW MULTI BOWL HEAD. TEST HEAD TO 2K PSI FOR 10 MINS.
	23:30 6:00	6.50	CASSURF	29		P	3,700.0	PJSA. N/U 11" 10M BOPE.
	6:00 11:00	5.00	CASSURF	28		P	3,700.0	FINISH N/U 11" 10 M BOPE. TESTED CHOKE MANIFOLD TO 250 PSI LOW, 10,000 PSI HIGH, ALL TEST RAN AT 10 MINUTES EACH.
12/5/2012	11:00 20:00	9.00	CASSURF	30		P	3,700.0	PJSM. RU & TESTED BOPE TO 250PSI LOW, 5,000 PSI. TESTED ANNULAR 300/2500 PSI. ALL TESTED FOR 10 MINS.
	20:00 22:00	2.00	CASSURF	31		P	3,700.0	TESTED CSG TO 2,500 PSI FOR 30 MINUTES.
	22:00 23:30	1.50	CASSURF	14		P	3,700.0	PU RYAN DIR ASSEMBLY, TEST & INSTALL BIT.
	23:30 1:30	2.00	CASSURF	14		P	3,700.0	PU 16 JTS OF 6 1/2" DC & TIH.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD From (ft)	Operation
	1:30 3:30	2.00	CASSURF	13		P	3,700.0	TIH TO 3,651'.
	3:30 4:30	1.00	CASSURF	32		P	3,700.0	DRILL OUT CMT FLOAT EQUIP, SHOE TRACK & 10'.
	4:30 5:00	0.50	CASSURF	15		P	3,710.0	CIRCULATE BOTTOMS UP.
	5:00 5:30	0.50	CASSURF	33		P	3,710.0	FIT TO 15.4 PPG EMW AT 3,700'.
	5:30 6:00	0.50	DRLINT1	07		P	3,710.0	DRILLED 3,710' - 3,715'.
12/6/2012	6:00 11:00	5.00	DRLINT1	07		P	3,715.0	DRILLED 3,715' - 4,100'.
	11:00 11:30	0.50	DRLINT1	12		P	4,100.0	SERVICE RIG & TDU.
	11:30 6:00	18.50	DRLINT1	07		P	4,100.0	DRILLED 4,100' - 5,460'.
12/7/2012	6:00 16:00	10.00	DRLINT1	07		P	5,460.0	DRILLED 5,460' - 5,959'.
	16:00 16:30	0.50	DRLINT1	12		P	5,959.0	SERVICE RIG & TDU.
	16:30 6:00	13.50	DRLINT1	07		P	5,959.0	DRILLED 5,959' - 6,540'.
12/8/2012	6:00 16:00	10.00	DRLINT1	07		P	6,540.0	DRILLED 6,540' - 6,889'.
	16:00 16:30	0.50	DRLINT1	12		P	6,889.0	SERVICE RIG & TDU.
	16:30 22:00	5.50	DRLINT1	07		P	6,889.0	DRILLED 6,889' - 6,996'.
	22:00 4:00	6.00	DRLINT1	13		P	6,996.0	POOH. LD MOTOR & BIT.
	4:00 6:00	2.00	DRLINT1	13		P	6,996.0	PU NEW MOTOR & BIT. TIH.
12/9/2012	6:00 8:30	2.50	DRLINT1	13		P	6,996.0	TIH, WASH DOWN LAST STD. NO FILL.
	8:30 11:30	3.00	DRLINT1	07		P	6,996.0	DRILLED 6,996' - 7,171'.
	11:30 12:00	0.50	DRLINT1	12		P	7,171.0	SERVICE RIG & TDU.
	12:00 22:30	10.50	DRLINT1	07		P	7,171.0	DRILLED 7,171' - 7,648'.
	22:30 23:30	1.00	DRLINT1	15		P	7,648.0	CIRCULATE, MIX SLUG.
	23:30 6:00	6.50	DRLINT1	13		P	7,648.0	POOH.
12/10/2012	6:00 6:30	0.50	DRLINT1	13		P	7,648.0	POOH, CO MOTOR.
	6:30 8:30	2.00	DRLINT1	13		P	7,648.0	TIH TO 3,613'.
	8:30 10:00	1.50	DRLINT1	17		P	7,648.0	SLIP & CUT DRILL LINE.
	10:00 11:30	1.50	DRLINT1	13		P	7,648.0	TIH, WASH DOWN LAST STD. NO FILL.
	11:30 15:00	3.50	DRLINT1	07		P	7,648.0	DRILLED 7,648' - 7,824'.
	15:00 15:30	0.50	DRLINT1	12		P	7,824.0	SERVICE RIG & TDU.
	15:30 6:00	14.50	DRLINT1	07		P	8,480.0	DRILLED 7,824' - 8,480'.
12/11/2012	6:00 7:00	1.00	DRLPRD	07		P	8,480.0	DRILLED 8,480' - 8,507'.
	7:00 9:00	2.00	DRLPRD	57		N	8,507.0	TROUBLE SHOOT MWD.
	9:00 10:00	1.00	DRLPRD	07		P	8,507.0	DRILLED 8,507' - 8,546'. LOST 302 BBLs @ 8,513'. PUMPED 2-15 BBL LCM SWEEPS @ 30PPB. WELL STATIC.
	10:00 11:00	1.00	DRLPRD	57		N	8,546.0	TROUBLE SHOOT MWD. CO RECEIVER BOX.
	11:00 14:30	3.50	DRLPRD	07		P	8,546.0	DRILLED 8,546' - 8,663'.
	14:30 15:00	0.50	DRLPRD	12		P	8,663.0	SERVICE RIG & TDU.
	15:00 6:00	15.00	DRLPRD	07		P	8,663.0	DRILLED 8,663' - 9,060'.
12/12/2012	6:00 19:00	13.00	DRLPRD	07		P	9,060.0	DRILLED 9,060' - 9,408'. LOST 65 BBL TO FORMATION @ 9,367'.
	19:00 19:30	0.50	DRLPRD	12		P	9,367.0	RIG SERVICE.
	19:30 6:00	10.50	DRLPRD	07		P	9,367.0	DRILLED 9,367' - 9,565'.
12/13/2012	6:00 14:30	8.50	DRLPRD	07		P	9,565.0	DRILLED 9,565' - 9,781'.
	14:30 15:00	0.50	DRLPRD	12		P	9,781.0	SERVICE RIG & TDU.
	15:00 6:00	15.00	DRLPRD	07		P	9,781.0	DRILLED 9,781' - 10,045'.
12/14/2012	6:00 11:30	5.50	DRLPRD	07		P	10,045.0	DRILLED 10,045' - 10,161'.
	11:30 12:00	0.50	DRLPRD	12		P	10,161.0	SERVICE RIG & TDU.
	12:00 14:00	2.00	DRLPRD	07		P	10,161.0	DRILLED 10,161' - 10,200'.
	14:00 15:00	1.00	EVLPRD	15		P	10,200.0	CBU. FLOW CHECK, WELL STATIC.
	15:00 1:30	10.50	EVLPRD	13		P	10,200.0	WIPER TRIP TO SHOE @ 3,700'.
	1:30 5:30	4.00	EVLPRD	15		P	10,200.0	C & C MUD. MAX GAS 5,900, MUD CUT 7.7 PPG.
	5:30 6:00	0.50	EVLPRD	13		P	10,200.0	POOH FOR LOGS.
	6:00 13:30	7.50	EVLPRD	13		P	10,200.0	POOH & LD DIRECTIONAL TOOLS.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
12/16/2012	13:30 23:30	10.00	EVLPRD	22		P	10,200.0	RU & RUN TRIPPLE COMBO TO 10,200'. LOG UP TO 8,050'. WL STUCK @ 8,050'. ATTEMPT TO WORK FREE. PULL 6,650 # OVER LINE TENSION. HELD FOR 10 MINUTES. TOOL BROKE FREE. CONTINUE LOGGING FROM 8,050' - 3,700'. POOH. LD TRIPPLE COMBO TOOL. PU XRFI TOOL. RIH TO 5,726'. TOOL SET DOWN. LOG FROM 5,726' - 3,700'. POOH. RD WL.
	23:30 0:00	0.50	CASPRD1	12		P	10,200.0	RIG SERVICE
	0:00 6:00	6.00	CASPRD1	13		P	10,200.0	TRIPPING IN HOLE.
	6:00 7:30	1.50	CASPRD1	15		P	10,200.0	C&C MUD. FLOW CHECK, WELL STATIC.
	7:30 19:30	12.00	CASPRD1	14		P	10,200.0	POOH LAYING DOWN 4½" DP & BHA. PULL WEAR BUSHING.
12/17/2012	19:30 6:00	10.50	CASPRD1	24		P	10,200.0	PJSM. RU & RUN 116 JTS 5.5" 17# HC-P110 LTC PRODUCTION CSG TO 4,528". CBU EVERY 3,000'. REDUCE MW TO 9.8 PPG. UTILIZED TORQUE TURN & FILL UP TOOL.
	6:00 18:00	12.00	CASPRD1	24		P	10,200.0	RAN 251 JTS 5.5" 17# HC-P110 LTC PROD CSG TO 10,200'. CBU EVERY 3,000'. REDUCE MW TO 9.6 PPG. UTILIZED TORQUE TURN & FILL UP TOOL. MARKER JTS SET @ 8,985' - 7,963' - 7,970'.
	18:00 19:00	1.00	CASPRD1	15		P		CIRCULATE 5-1/2" CASING ON BOTTOM @ 10,200'.
	19:00 23:30	4.50	CASPRD1	25		P	10,200.0	RIG UP HALLIBURTON. TESTED LINES TO 5M . PUMPED 10BBL WTR, 20 BBLS 10PPG TUNED SPACER, 764 SKS ( 284 BBLS) 12.3 PPG 2.09 YIELD EXPANDACEM LEAD CMT. 400 SKS 1.61 YD ( 114 BBLS ) 12.3PPG PREMIUM TAIL CEMENT. WASHED LINES. DROPPED PLUG & DISPLACED WITH 235 BBLS CLAY FIX WTR. BUMPED PLUG TO 2,497 PSI @ 22:26 HRS. FLOATS HELD. BLED BACK 2BBL. LOST 61 BBLS DURING DISPLACEMENT. RD HES. EST TOC 4,437'.
	23:30 0:00	0.50	CASPRD1	27		P	10,200.0	SET CASING SLIPS WITH 110K STRING WEIGHT.
	0:00 5:30	5.50	CASPRD1	29		P		ND BOPE.
	5:30 6:00	0.50	CASPRD1	27		P	10,200.0	INSTALLING TUBING HEAD.
12/18/2012	6:00 10:00	4.00	CASPRD1	27		P	10,200.0	MAKE FINAL CUT ON CSG. INSTALL 11" x 7-1/16" 10M TBG HEAD & TEST TO 5,000 PSI FOR 10 MIN. INSTALL FRAC VALVE. RIG RELEASED @ 10:00 HRS 12/17/12
	10:00 6:00	20.00	RDMO	02		P	10,200.0	RIG DOWN.

## 1 General

### 1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

### 1.2 Well Information

Well	ALLISON 4-19C5		
Project	ALTAMONT FIELD	Site	ALLISON 4-19C5
Rig Name/No.		Event	COMPLETION LAND
Start Date	12/26/2012	End Date	3/27/2013
Spud Date/Time	11/25/2012	UWI	ALLISON 4-19C5
Active Datum	KB @5,974.0ft (above Mean Sea Level)		
Afe No./Description	156902/46968 / ALLISON 4-19C5		

## 2 Summary

### 2.1 Operation Summary

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
12/28/2012	6:00 7:30	1.50	MIRU	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON ROADING RIG. FILL OUT & REVIEW JSA
	7:30 13:30	6.00	MIRU	01		P		ROAD RIG FROM THE 3-21B4 TO LOCATION & RIG UP, CHAINING UP RIG AS NEEDED
	13:30 16:00	2.50	WBP	18		P		RU WIRELINE TRUCK. RIH W/ 4.5"OD GAUGE RING & TAG PBTD @ 10105'. POOH & RD WIRELINE TRUCK
	16:00 17:30	1.50	WBP	16		P		ND FRAC VALVE. NU BOP. RU WORK FLOOR. SDFN
12/29/2012	6:00 7:30	1.50	WBP	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON BODY POSITION WHILE LIFTING. FILL OUT & REVIEW JSA
	7:30 15:00	7.50	WBP	39		P		MEASURE PICKUP & TIH W/ 4-3/4"OD BIT, BIT SUB & 318 JTS 2-7/8"EUE TBG. TAG UP @ 10110'. POOH W/ 11 JTS TBG.
	15:00 16:30	1.50	WBP	18		P		RU PMP & PUMP LINES. RU POWER SWIVEL. SDFN
12/30/2012	6:00 7:30	1.50	WBP	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON COLD WEATHER OPERATIONS. FILL OUT & REVIEW JSA
	7:30 12:00	4.50	WBP	10		P		TIH W/ 10 JTS 2-7/8"EUE TBG. RU POWER SWIVEL. BREAK REVERSE CIRCULATION. CLEAN OUT FROM 10110' TO 11017'. CIRCULATE HOLE W/ 262 BBLS 2% KCL WTR. RD POWER SWIVEL.
	12:00 17:30	5.50	WBP	24		P		TOOH LAYING DOWN 319 JTS 2-7/8"EUE TBG, BIT SUB & BIT. SDFN
12/31/2012	6:00 6:00	24.00						SHUT DOWN FOR SUNDAY
1/1/2013	6:00 7:30	1.50	WBP	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON RIGGING DOWN RIG. FILL OUT & REVIEW JSA
	7:30 10:00	2.50	RDMO	02		P		RD RIG & RACK OUT EQUIPMENT.
	10:00 16:30	6.50	WBP	18		P		RIH & RUN BOND LOG WHILE HOLDING 3000 PSI ON CSG, FROM PBTD 10105' WLM TO 3000'. FOUND CMT TOP @ 4050'. RD WIRELINE TRUCK. SDFN
1/2/2013	6:00 6:00	24.00				P		SHUT DOWN FOR NEW YEARS HOLIDAY
1/3/2013	6:00 7:30	1.50	WBP	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON CRANE SAFETY. FILL OUT & REVIEW JSA
	7:30 2:00	18.50	WBP	18		P		MOVE IN & SET UP POSEIDON FRAC TANK
1/4/2013	6:00 7:30	1.50	WBP	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PRESSURE TESTING CSG. FILL OUT & REVIEW JSA

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
	7:30 15:00	7.50	WBP	18		P		RU HOT OILER & TEST UNIT. PRESSURE TEST CSG TO 8000 PSI. LOST 400 PSI IN 30 MINUTES. BLEED PRESSURE OFF WELL. RD PRESSURE TEST EQUIPMENT.
1/5/2013	6:00 7:30	1.50	WBP	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON WIRELINE SAFETY. FILL OUT & REVIEW JSA.
	7:30 11:00	3.50	WBP	27		P		MIRU WIRELINE EQUIPMENT. RIH & SET CBP @ 10105'. POOH W/ WIRELINE.
	11:00 13:00	2.00	WBP	18		P		RU HOT OILER & TEST UNIT. PRESSURE TEST CSG. TESTED GOOD. RD TEST EQUIPMENT.
	13:00 17:00	4.00	STG01	21		P		RU WIRELINE UNIT. RIH & PERF STAGE 1 PERFORATIONS 9845' TO 1088' UNDER 1000 PSI. PRESSURE DROPPED TO 600 PSI WHILE PERFORATING. RD WIRELINE EQUIPMENT. SDFN
1/6/2013	6:00 7:30	1.50	STG01	28		P		TRAVEL MTO LOCATION. HOLD SAFETY MEETING ON RIGGING UP ISOLATION TOOL. FILL OUT & REVIEW JSA
	7:30 11:00	3.50	STG01	16		P		RU & TEST CSG ISOLATION TOOL.
	11:00 18:00	7.00	STG01	18		P		MIX ACID TANKS & HEAT FRAC WTR.
1/7/2013	6:00 7:30	1.50	MIRU	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON RIGGING UP & FRAC SAFETY. FILL OUT & REVIEW JSA
	7:30 17:00	9.50	MIRU	01		P		MOVE IN & RU FRAC EQUIPMENT
	17:00 20:00	3.00	STG01	35		P		PRESSURE TEST LINES TO 9448 PSI. SICP 260 PSI. BREAK DOWN STAGE 1 PERFS @ 2888 PSI, 11 BPM. TREATED PERFS W/ 5000 GALS 15% HCL ACID. AVG RATE 10.5 BPM, MAX RATE 11 BPM, AVG PRESS 2914 PSI. MAX PRESS 2977 PSI. I.S.I.P 2936 PSI F.G. .72. 5 MINUTE 2838 PSI, 10 MINUTE 2783 PSI, 15 MINUTE 2748 PSI. PUMPED 3000 LBS 100 MESH SAND IN 1/2 PPG STAGE AND 11501 LBS TEMPERED LC 20/40 SAND IN 1PPG, 1.5 PPG, 2PPG, 3PPG, 3.5 PPG & 4PPG STAGES. AVG RATE 68.7 BPM, MAX RATE 74.6 BPM. AVG PRESS 4413 PSI, MAX PRESS 4791 PSI. I.S.I.P. 3173 PSI F.G. .75. 5 MIN 2987 PSI. 10 MIN 2957 PSI. SHUT WELL IN. 2592 BBLS TO RECOVER TURNED WELL OVER TO WIRELINE.
	20:00 23:00	3.00	STG02	21		P		EQUALIZE LUBRICATOR. RIH & SET CBP @ 9842'. PERFORATE STAGE 2 PERFORATIONS 9575' TO 9576', USING 3-1/8" HSC GUNS, 3 JSPF, 120 DEGREE PHASING. PRESSURE DROPPED FROM 2400 PSI TO 2100 PSI WHILE PERFORATING. SDFN
1/8/2013	6:00 7:30	1.50	STG02	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON FRAC SAFETY. FILL OUT & REVIEW JSA.
	7:30 10:30	3.00	STG02	35		P		PRESSURE TEST LINES TO 9436 PSI. SICP 2328 PSI. BREAK DOWN STAGE 2 PERFS @ 2806 PSI, 11 BPM. TREATED PERFS W/ 5000 GALS 15% HCL ACID. I.S.I.P 3024 PSI F.G. .74. 5 MINUTE 2770 PSI, 10 MINUTE 2740 PSI, 15 MINUTE 2716 PSI. PUMPED 3000 LBS 100 MESH SAND IN 1/2 PPG STAGE AND 120,000 LBS TEMPERED LC 20/40 SAND IN 1PPG, 1.5 PPG, 2PPG, 3PPG, 3.5 PPG & 4PPG STAGES. AVG RATE 70.6 BPM, MAX RATE 71 BPM. AVG PRESS 4600 PSI, MAX PRESS 5158 PSI. I.S.I.P. 3294 PSI F.G. .77. 5 MIN 3154 PSI. 10 MIN 3095 PSI, 15 MIN 3070 PSI. SHUT WELL IN. 3135 BBLS TO RECOVER TURNED WELL OVER TO WIRELINE.
	10:30 12:30	2.00	STG03	21		P		PRESSURE TEST LUBRICATOR TO 3000 PSI. RIH & SET CBP @ 9563'. PERFORATE STAGE 3 PERFORATIONS 9325' TO 9553', USING 3-1/8" HSC GUNS, 3 JSPF, 120 DEGREE PHASING. LOST 200 PSI WHILE PERFORATING

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
	12:30 14:30	2.00	STG03	35		P		PRESSURE TEST LINES TO 9622 PSI. SICP 2637 PSI. BREAK DOWN STAGE 3 PERFS @ 3355 PSI, 11 BPM . TREATED PERFS W/ 5000 GALS 15% HCL ACID. I.S.I.P 3209 PSI F.G. .77. 5 MINUTE 2625 PSI, 10 MINUTE 2606 PSI, 15 MINUTE 2589 PSI . PUMPED 3000 LBS 100 MESH SAND IN 1/2 PPG STAGE AND 115,000 LBS TEMPERED LC 20/40 SAND IN 1PPG, 1.5 PPG, 2PPG, 3PPG, 3.5 PPG & 4PPG STAGES. AVG RATE 70 BPM, MAX RATE 74 BPM. AVG PRESS 4598 PSI, MAX PRESS 6131 PSI. I.S.I.P. 3338 PSI F.G. .78. 5 MIN 3127 PSI. 10 MIN 30605 PSI, 15 MIN 3017 PSI. SHUT WELL IN. 2499 BBLS TO RECOVER TURNED WELL OVER TO WIRELINE.
	14:30 16:00	1.50	STG04	21		P		PRESSURE TEST LUBRICATOR TO 3000 PSI. RIH & SET CBP @ 9318'. PERFORATE STAGE 4 PERFORATIONS 9049' TO 9302', USING 3-1/8" HSC GUNS, 3 JSPF, 120 DEGREE PHASING. LOST 475 PSI WHILE PERFORATING
	16:00 17:30	1.50	STG04	35		P		PRESSURE TEST LINES TO 9300 PSI. SICP 1909 PSI. BREAK DOWN STAGE 4 PERFS @ 2935 PSI, 11 BPM . TREATED PERFS W/ 5000 GALS 15% HCL ACID. I.S.I.P 2862 PSI F.G. .74. 5 MINUTE 2482 PSI, 10 MINUTE 2374 PSI, 15 MINUTE 2279 PSI . PUMPED 3000 LBS 100 MESH SAND IN 1/2 PPG STAGE AND 123,000 LBS TEMPERED LC 20/40 SAND IN 1PPG, 1.5 PPG, 2PPG, 3PPG, 3.5 PPG & 4PPG STAGES. AVG RATE 69.6 BPM, MAX RATE 72.7 BPM. AVG PRESS 4258 PSI, MAX PRESS 5836 PSI. I.S.I.P. 3555 PSI F.G. .82. 5 MIN 3231 PSI. 10 MIN 3184 PSI, 15 MIN 3147 PSI. SHUT WELL IN. 2458 BBLS TO RECOVER TURNED WELL OVER TO WIRELINE.
	17:30 17:30	0.00	STG05	21		P		PRESSURE TEST LUBRICATOR TO 3000 PSI. RIH & SET CBP @ 9036'. PERFORATE STAGE 5 PERFORATIONS 8790' TO 9020', USING 3-1/8" HSC GUNS, 3 JSPF, 120 DEGREE PHASING. LOST 200 PSI WHILE PERFORATING
	17:30 20:00	2.50	STG05					PRESSURE TEST LINES TO 9667 PSI. SICP 2297 PSI. BREAK DOWN STAGE 5 PERFS @ 3113 PSI, 11 BPM . TREATED PERFS W/ 5000 GALS 15% HCL ACID. I.S.I.P 2515 PSI F.G. .71. 5 MINUTE 2134 PSI, 10 MINUTE 1960 PSI, 15 MINUTE 1907 PSI . PUMPED 3000 LBS 100 MESH SAND IN 1/2 PPG STAGE AND 120,000 LBS TEMPERED LC 20/40 SAND IN 1PPG, 1.5 PPG, 2PPG, 3PPG, 3.5 PPG & 4PPG STAGES. AVG RATE 61 BPM, MAX RATE 71 BPM. AVG PRESS 5962 PSI, MAX PRESS 5982 PSI. I.S.I.P. 3183 PSI F.G. .79. 5 MIN 2959 PSI. 10 MIN 2913 PSI, 15 MIN 2863 PSI. SHUT WELL IN. 2372 BBLS TO RECOVER.SDFN
1/9/2013	6:00 7:30	1.50	STG06	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON WIRELINE SAFETY. FILL OUT & REVIEW JSA
	7:30 9:00	1.50	STG06	21		P		PRESSURE TEST LUBRICATOR TO 3000 PSI. RIH & SET CBP @ 8783'. PERFORATE STAGE 6 PERFORATIONS 8580' TO 8773', USING 3-1/8" HSC GUNS, 3 JSPF, 120 DEGREE PHASING. LOST 500 PSI WHILE PERFORATING

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
	9:00 10:30	1.50	STG06	35		P		PRESSURE TEST LINES TO 9300 PSI. SICP 1485 PSI. BREAK DOWN STAGE 6 PERFS @ 2471 PSI, 11 BPM . TREATED PERFS W/ 5000 GALS 15% HCL ACID. I.S.I.P 2316 PSI F.G. .70. 5 MINUTE 1170 PSI, 10 MINUTE 924 PSI, 15 MINUTE 549 PSI . PUMPED 4000 LBS 100 MESH SAND IN 1/2 PPG STAGE AND 110,000 LBS TEMPERED LC 20/40 SAND IN 1PPG, 1.5 PPG, 2PPG, 3PPG, 3.5 PPG & 4PPG STAGES. AVG RATE 64.5 BPM, MAX RATE 68.7 BPM. AVG PRESS 3883 PSI, MAX PRESS 4821 PSI. I.S.I.P. 2165 PSI F.G. .68. 5 MIN 1562 PSI. 10 MIN 1368 PSI, 15 MIN 1270 PSI. SHUT WELL IN. 2334 BBLS TO RECOVER.TURN WELL OVER TO WIRELINE
	10:30 15:00	4.50	STG07	21		P		WHILE MAKING UP LUBRICATOR CABLE HEAD FAILED. LD LUBRICATOR & PERF GUN & REHEAD. PU LUBRICATOR & PERF GUN. PRESSURE TEST LUBRICATOR TO 3000 PSI. RIH & SET CBP @ 8575'. PERFORATE STAGE 7 PERFORATIONS 8369' TO 8560', USING 3-1/8" HSC GUNS, 3 JSPF, 120 DEGREE PHASING. LOST 200 PSI WHILE PERFORATING
	15:00 16:30	1.50	STG07	35		P		PRESSURE TEST LINES TO 9693 PSI. SICP 958 PSI. BREAK DOWN STAGE 7 PERFS @ 1641 PSI, 11 BPM . TREATED PERFS W/ 5000 GALS 15% HCL ACID. I.S.I.P 1670 PSI F.G. .63. 5 MINUTE 1314 PSI, 10 MINUTE 1110 PSI, 15 MINUTE 1040 PSI . PUMPED 3000 LBS 100 MESH SAND IN 1/2 PPG STAGE AND 110,000 LBS PREMIUM 20/40 SAND IN 1PPG, 1.5 PPG, 2PPG, 3PPG, 3.5 PPG & 4PPG STAGES. AVG RATE 65 BPM, MAX RATE 66 BPM. AVG PRESS 3168 PSI, MAX PRESS 4207 PSI. I.S.I.P. 2110 PSI F.G. .68. 5 MIN 1808 PSI. 10 MIN 1714 PSI, 15 MIN 1643 PSI. SHUT WELL IN. 2208 BBLS TO RECOVER.TURN WELL OVER TO WIRELINE
	16:30 18:00	1.50	STG08	21		P		PRESSURE TEST LUBRICATOR TO 3000 PSI. RIH & SET CBP @ 8360'. PERFORATE STAGE 8 PERFORATIONS 8158' TO 8344', USING 3-1/8" HSC GUNS, 3 JSPF, 120 DEGREE PHASING. LOST 450 PSI WHILE PERFORATING
	18:00 18:00	0.00	STG08	35		P		PRESSURE TEST LINES TO 9300 PSI. SICP 950 PSI. BREAK DOWN STAGE 8 PERFS @ 2203 PSI, 11 BPM . TREATED PERFS W/ 5000 GALS 15% HCL ACID. I.S.I.P 1927 PSI F.G. .66 MINUTE 1448 PSI, 10 MINUTE 1265 PSI, 15 MINUTE 1182 PSI . DURING FRAC LOST SUCTION @ END OF 2 PPG STAGE. FLUSHED TO TOP PERF W/ 10PPG BRINE WTR. TTL OF 50,000 3 IN PERFS. SDFN
1/10/2013	6:30 7:30	1.00	STG08	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON FRAC SAFETY. FILL OUT & REVIEW JSA.
	7:30 14:30	7.00	STG08	18		P		CONTINUE TO HAUL & HEAT FRAC WTR
	14:30 15:00	0.50	STG08	35		P		REFRAC STAGE 8 PERFORATIONS. PUMPED 3000 TTL POUNDS 100 MESH SAND IN 1/2 PPG STAGE & 110000 POUNDS PREMIUM 20/40 SAND IN 1 PPG, 2 PPG, 3 PPG, 3-1/2 PPG & 4 PPG STAGES. AVG RATE 51 BPM. MAX RATE 65 BPM. AVG PSI 2998 PSI. MAX PSI 4914 PSI. ISIP 2197 PSI. FG .70. 5 MINUTE 900 PSI. 10 MINUTE 631PSI. 15 MINUTE 533 PSI. SHUT WELL IN
	15:00 18:00	3.00	RDMO	02		P		RD FRAC EQUIPMENT & CSG ISOLATION TOOL. SDFN
1/11/2013	6:00 7:30	1.50	MIRU	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON RIGGING UP COIL TBG. FILL OUT & REVIEW JSA
	7:30 11:30	4.00	MIRU	10		P		RU COIL TBG UNIT. LOAD COIL W/ HOT WTR. MU & TEST TOOLS.
	11:30 3:30	16.00	CTU	10		P		RIH & DRILL 7 CBP'S. CO TO PBTD. USED N2 ON 1st & 3rd PLUG DRILLED. WELL CIRCULATED WELL ON REST OF JOB. TAG PBTD & CIRCULATE CLEAN. POOH W/ COIL TBG TOOLS
	3:30 6:00	2.50	RDMO	02		P		RD COIL TBG UNIT.

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD From (ft)	Operation
1/12/2013	6:00 6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON CHANGING CHOKES. FILL OUT & REVIEW JSA
	6:30 6:00	23.50	FB	19		P		OPEN WELL TO FLOWBACK TANK. FLOW WELL 6HRS THEN TURNED TO PRODUCTION FACILITY. RECOVERED 361 BBLS WTR, 76 MCF GAS FLOWING @950 PSI ON A 14/64" CHOKE.
1/13/2013	6:00 6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON SLIPS TRIPS & FALLS. FILL OUT & REVIEW JSA
	6:30 6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 285 MCF GAS, 187 BBLS OIL & 390 BBLS WTR FLOWING @ 1050 PSI ON A 14/64" CHOKE
1/14/2013	6:00 6:30	0.50	FB	19		P		HOLD SAFETY MEETING ON TRIP HAZARDS. FILL OUT & REVIEW JSA
	6:30 6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 316 MCF GAS, 72 BBLS OIL & 342 BBLS WTR FLOWING @ 1000 PSI ON A 14/64" CHOKE.
1/15/2013	6:00 7:30	1.50	WBREMD	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON WIRELINE SAFETY. FILL OUT & REVIEW JSA
	7:30 14:00	6.50	WLWORK	27		P		RU WIRELINE TRUCK. THAW BOP. RIH W/ 4.65 OD GUAGE RING TO 8157'. POOH W/ GUAGE RING. RIH & SET PKR @ 8090'. POOH W/ SETTING TOOL & RD WIRELINE UNIT
	14:00 19:00	5.00	MIRU	01		P		MI RU RIG & EQUIPMENT. SPOT CATWALK & PIPE RACKS. MOVE TBG TO PIPE RACKS. SDFN
1/16/2013	6:00 7:30	1.50	WBREMD	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PICKING UP TBG. FILL OUT & REVIEW JSA.
	7:30 14:00	6.50	WBREMD	24		P		RIHW/ ON/OFF TOOL & 255 JTS 2-7/8"EUE TBG. TAG PKR SET @ 8090' WLM. RELEASE ON OFF TOOL.
	14:00 16:30	2.50	WBREMD	06		P		CIRCULATE W/ 200 BBLS PKR FLUID
	16:30 19:30	3.00	WBREMD	16		P		ND BOP. NU WELLHEAD & PLUMB FLOW LINES. TEST WELLHEAD VOID.
	19:30 21:00	1.50	WBREMD	18		P		PRESSURE TEST CSG TO 1000 PSI. TESTED GOOD. PUMP OUT PLUG @ 2300 PSI. TURN WELL TO PRODUCTION FACILITY.
	21:00 6:00	9.00	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 36 MCF GAS, 44 BBLS OIL & 142 BBLS WTR, FLOWING @ 1250 PSI ON A 14/64" CHOKE
1/17/2013	6:00 6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON WORKING IN EXTREME COLD WEATHER
	6:30 6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 412 MCF GAS, 118 BBLS OIL & 308 BBLS WTR, FLOWING @ 1100 PSI ON A 14/64" CHOKE
1/18/2013	6:00 6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON GUAGING TANKS. FILL OUT & REVIEW JSA
	6:30 6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 328 MCF GAS, 111 BBLS OIL & 287 BBLS WTR, FLOWING @1050 PSI ON A 14/64" CHOKE
1/19/2013	6:00 6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON CHANGING CHOKE. FILL OUT & REVIEW JSA
	6:30 6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 367 MCF GAS, 200 BBLS OIL & 359 BBLS WTR, FLOWING @ 1000 PSI ON A 16/64" CHOKE
1/20/2013	6:00 6:30	0.50	FB	28		P		HOLD SAFETY MEETING ON SLIPS TRIPS & FALLS. FILL OUT & REVIEW JSA
	6:30 6:00	23.50	FB	19		P		FLOW WELL TO PRODUCTION FACILITY. RECOVERED 403 MCF GAS, 144 BBLS OIL & 373 BBLS WTR, FLOWING @ 950 PSI ON A 16/64" CHOKE
3/26/2013	6:00 7:30	1.50	MIRU	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON ROADING RIG. FILL OUT & REVIEW JSA

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD From (ft)	Operation
	7:30 10:00	2.50	MIRU	01		P		MOVE RIG FROM WILSON 1-19C5 TO LOCATION & RIG UP.
	10:00 11:00	1.00	PRDHEQ	06		P		PUMP 60 BBLS 2% KCL WTR DOWN TBG TO KILL WELL.
	11:00 12:00	1.00	PRDHEQ	16		P		ND WELL HEAD. NU BOP
	12:00 18:00	6.00	PRDHEQ	39		P		RELEASE PKR @ 8090' & TOO H W/ TBG & PKR. TALLY IN HOLE W/ 2-7/8"EUE BULL PLUG, 2 JTS 2-7/8"EUE TBG, 3-1/2"ODPBGA, SEAT NIPPLE, 4' X 2-7/8"EUE TBG, TAC & 168 jts 2-7/8"EUE TBG. SDFN
3/27/2013	6:00 7:30	1.50	INARTLT	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PICKING UP TBG. FILL OUT & REVIEW JSA
	7:30 11:30	4.00	INARTLT	24		P		CONTINUE TIH W/ 125 JTS 2-7/8"EUE TBG, KILLING TBG AS NEEDED. TAG PBTD @ 10105'. LD 1 JT TBG. PU 16' PUP JTS.
	11:30 16:30	5.00	SL	18		P		RU SLICKLINE UNIT. RIH & LOG DOWN FROM 70650' TO BULL PLUG @ 10082' WLM. LOG OUT OF HOLE TO 7650'. RD WIRELINE UNIT. DOWNLOAD INFORMATION.
	16:30 18:00	1.50	INARTLT	24		P		LD 78 JTS 2-1/8"EUE TBG. ATTEMPT TO SET TAC @ 7388'. UNABLE TO SET TAC. MOVE UP HOLE 30'. UNABLE TO SET TAC. SDFN
3/28/2013	6:00 7:30	1.50	INARTLT	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON SETTING TAC. FILL OUT & REVIEW JSA
	7:30 9:00	1.50	INARTLT	18		P		PUMP 20 BBLS 2% KCL WTR DOWN CSG. SET TAC @ 7388' IN 25K TENSION. ND BOP
	9:00 12:00	3.00	INARTLT	16		P		LAND TBG. PLUMB WELLHEAD & FLOWLINES. FLUSH TBG W/ 50 BBLS 2% KCL WTR
	12:00 17:30	5.50	INARTLT	24		P		PU & PRIME 2' X 2-1/2"RHBC PUMP. TIH W/ PUMP, 11 1-1/2" WEIGHT RODS, 80 3/4" RODS, 99 7/8" RODS & 21 1" RODS. IT WAS DISCOVERED THAT LONG DIP TUBE HAD NOT BEEN RUN ON PUMP. POOH W/ RODS & PUMP. SDFN
3/29/2013	6:00 7:30	1.50	INARTLT	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON TRIPPING RODS. FILL OUT & REVIEW JSA.
	7:30 11:30	4.00	INARTLT	39		P		INSTALL LONG DIP TUBE ON PUMP. TIH W/ 2-1/2" X 2" PUMP, 12 1-1/5"WEIGHT RODS, 79 3/4" RODS, 99 7/8" RODS & 107 1" RODS. SPACE OUT W/ 4' & 2' X 1" PONY RODS & 40 POLISH ROD. FILL TBG W/ 20 BBLS 2% KCL WTR. STROKE TEST PUMP TO 1000 PSI. TESTED GOOD
	11:30 12:30	1.00	RDMO	02		P		RD RIG.
	12:30 16:30	4.00	INARTLT	18		P		SLIDE PUMPING UNIT. HANG ROD STRING. START WELL PUMPING. PUMP GAS LOCKED. LOWER ROD STRING TO TAG ON DOWN STROKE. MONITER WELL

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MININGAMENDED REPORT ☐ FORM 8  
(highlight changes)

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL:		OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	OTHER <input type="checkbox"/>	5. LEASE DESIGNATION AND SERIAL NUMBER: Fee	
b. TYPE OF WORK:		NEW WELL <input checked="" type="checkbox"/>	HORIZ. LATS. <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	RE-ENTRY <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	OTHER <input type="checkbox"/>
2. NAME OF OPERATOR: EP Energy E&P Company, L.P.						6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR: 1001 Louisiana Street CITY Houston STATE TX ZIP 77002						7. UNIT or CA AGREEMENT NAME	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 707 FSL & 786 FEL AT TOP PRODUCING INTERVAL REPORTED BELOW: 707 FSL & 786 FEL AT TOTAL DEPTH: 707 FSL & 786 FEL						8. WELL NAME and NUMBER: Allison 4-19C5	
14. DATE SPUDDED: 10/10/2012						9. API NUMBER: 4301351466	
15. DATE T.D. REACHED: 12/13/2012						10. FIELD AND POOL, OR WILDCAT Altamont	
16. DATE COMPLETED: 1/10/2013						11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 19 3S 5W U	
18. TOTAL DEPTH: MD 10,200 TVD 10,191						12. COUNTY Duchesne	
19. PLUG BACK T.D.: MD TVD						13. STATE UTAH	
20. IF MULTIPLE COMPLETIONS, HOW MANY? *						17. ELEVATIONS (DF, RKB, RT, GL): 5957'	
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)						21. DEPTH BRIDGE PLUG SET: MD TVD	
23.						25. TUBING RECORD	
WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis)							
WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report)							
DIRECTIONAL SURVEY? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit copy)							

## 24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
17-1/2	13-3/8 J55	54.5#	0	803				0	
12-1/4	9-5/8 N80L	40#	0	3,700		35/65 / P 1,525	2,872	0	
8-3/4	5-1/2 P110	29#	0	10,200		Premium 1,164	2,241	4437	

## 25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8	8,090	8,090						

## 26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) Wasatch	8,158	10,088	8,150	10,079	9,845 10,088	.43	24	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)					9,575 9,829	.43	24	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(C)					9,325 9,553	.43	24	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(D)					9,049 9,302	.43	24	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>

## 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. \* See attachment for additional records

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
9,845 - 10,088	5,000 glns acid, 3,000# 100 mesh, 115,001# 20/40 tempered LC
9,575 - 9,829	5,000 glns acid, 3,000# 100 mesh, 120,000# 20/40 tempered LC
9,325 - 9,553	5,000 glns acid, 3,000# 100 mesh, 115,000# 20/40 tempered LC

## 29. ENCLOSED ATTACHMENTS:

\*NOTE - logs submitted directly to UDOGM by vendor

- ☐ ELECTRICAL/MECHANICAL LOGS    ☐ GEOLOGIC REPORT    ☐ DST REPORT    ☐ DIRECTIONAL SURVEY  
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION    ☐ CORE ANALYSIS    ☒ OTHER: Deviation Summary Report

## 30. WELL STATUS:

Prod

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 1/12/2013	TEST DATE: 1/11/2013	HOURS TESTED: 72	TEST PRODUCTION RATES: →	OIL – BBL: 111	GAS – MCF: 328	WATER – BBL: 287	PROD. METHOD: tubing
CHOKE SIZE: 14/64	TBG. PRESS. 1,050	CSG. PRESS.	API GRAVITY 42.00	BTU – GAS 1,450	GAS/OIL RATIO 2,955	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Sold

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Wasatch	8,158
				Lower Green River	6,335
				Middle Green River	5,113
				Upper Green River	3,478

## 35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Lisa Morales

TITLE Regulatory Analyst II

SIGNATURE

DATE 5/2/2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

EP Energy E&amp;P Company, L.P.

Allison 4-19C5

API No. 43-013-51466

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<b>No. 27 - PERFORATION RECORD</b>								
INTERVAL (Top/Bot - MD)		SIZE	NO. HOLES	PERFORATION STATUS				
8,790	9,020	0.43	24	Open	X	Squeezed		
8,580	8,773	0.43	24	Open	X	Squeezed		
8,369	8,560	0.43	24	Open	X	Squeezed		
8,158	8,344	0.43	24	Open	X	Squeezed		

<b>No. 28 - ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.</b>		
DEPTH INTERVAL		AMOUNT AND TYPE OF MATERIAL
9,049	9,302	5,000 glns acid; 3,000# 100 mesh; 123,000# 20/40 tempered lc
8,790	9,020	5,000 glns acid; 3,000# 100 mesh; 120,000# 20/40 tempered lc
8,580	8,773	5,000 glns acid; 4,000# 100 mesh; 110,000# 20/40 tempered lc
8,369	8,560	5,000 glns acid; 3,000# 100 mesh; 110,000# 20/40 premium sand
8,158	8,344	5,000 glns acid; 3,000# 100 mesh; 110,000# 20/40 premium sand

## CENTRAL DIVISION

ALTAMONT FIELD  
ALLISON 4-19C5  
ALLISON 4-19C5  
ALLISON 4-19C5

## Deviation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

RECEIVED: May. 02, 2013

**1 General****1.1 Customer Information**

Company	CENTRAL DIVISION
Representative	
Address	

**1.2 Well Information**

Well	ALLISON 4-19C5	Wellbore No.	OH
Wellbore Legal Name	ALLISON 4-19C5	Common Wellbore Name	ALLISON 4-19C5
Project	ALTAMONT FIELD	Site	ALLISON 4-19C5
Vertical Section Azimuth	0.00 (°)	North Reference	True
Origin N/S	0.0 (ft)	Origin E/W	0.0 (ft)
Spud Date/Time	11/25/2012	UWI	ALLISON 4-19C5
Active Datum	KB @5,974.0ft (above Mean Sea Level)		

**2 Survey Name****2.1 Survey Name: Survey #1**

Survey Name	Survey #1	Company	PROPETRO SERVICES INC
Started	10/15/2012	Ended	10/17/2012
Tool Name	MSS	Engineer	WAYNE MOORE

**2.1.1 Tie On Point**

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.0	0.00	0.00

**2.1.2 Survey Stations**

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
10/15/2012	Tie On	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/15/2012	NORMAL	300.0	0.66	25.55	300.0	1.56	0.75	1.56	0.22	0.22	0.00	25.55
	NORMAL	550.0	0.46	64.84	550.0	3.28	2.27	3.28	0.17	-0.08	15.72	136.22
	NORMAL	800.0	0.39	45.87	800.0	4.30	3.79	4.30	0.06	-0.03	-7.59	-125.72

**2.2 Survey Name: Survey #2**

Survey Name	Survey #2	Company	VAUGHN ENERGY SERVICES LLC (GYRO TECHNOLOGIES INC)
Started	12/1/2012	Ended	
Tool Name	GYRO	Engineer	El Paso

**2.2.1 Tie On Point**

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.0	0.00	0.00

## 2.2.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/1/2012	Tie On	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12/1/2012	NORMAL	200.0	0.32	168.10	200.0	-0.54	0.11	-0.54	0.16	0.16	0.00	168.10
	NORMAL	400.0	0.42	157.40	400.0	-1.76	0.51	-1.76	0.06	0.05	-5.35	-38.18
	NORMAL	600.0	0.09	144.84	600.0	-2.56	0.88	-2.56	0.17	-0.17	-6.28	-176.65
	NORMAL	800.0	0.17	178.24	800.0	-2.99	0.98	-2.99	0.05	0.04	16.70	61.23
	NORMAL	1,000.0	0.20	206.73	1,000.0	-3.59	0.84	-3.59	0.05	0.01	14.24	88.00
	NORMAL	1,200.0	0.99	228.10	1,200.0	-5.05	-0.60	-5.05	0.41	0.40	10.69	26.42
	NORMAL	1,400.0	1.94	220.10	1,399.9	-8.80	-4.08	-8.80	0.49	0.48	-4.00	-16.18
	NORMAL	1,600.0	2.03	220.25	1,599.8	-14.10	-8.55	-14.10	0.05	0.05	0.07	3.28
	NORMAL	1,800.0	2.47	226.09	1,799.6	-19.80	-13.95	-19.80	0.24	0.22	2.92	30.89
	NORMAL	2,000.0	2.92	224.11	1,999.4	-26.44	-20.59	-26.44	0.23	0.23	-0.99	-12.52
	NORMAL	2,200.0	3.66	222.74	2,199.1	-34.79	-28.47	-34.79	0.37	0.37	-0.69	-6.77
	NORMAL	2,400.0	4.10	216.36	2,398.6	-45.23	-37.04	-45.23	0.31	0.22	-3.19	-47.72
	NORMAL	2,600.0	4.87	213.64	2,598.0	-58.06	-45.99	-58.06	0.40	0.39	-1.36	-16.71
	NORMAL	2,800.0	5.68	210.66	2,797.2	-73.64	-55.74	-73.64	0.42	0.40	-1.49	-20.34
	NORMAL	3,000.0	5.50	209.03	2,996.2	-90.52	-65.43	-90.52	0.12	-0.09	-0.81	-139.42
	NORMAL	3,200.0	4.85	207.54	3,195.4	-106.38	-73.98	-106.38	0.33	-0.32	-0.74	-169.04
	NORMAL	3,400.0	4.60	207.46	3,394.7	-120.99	-81.59	-120.99	0.13	-0.12	-0.04	-178.53
	NORMAL	3,600.0	4.31	208.66	3,594.1	-134.69	-88.88	-134.69	0.15	-0.15	0.60	162.94
	NORMAL	3,650.0	4.45	208.21	3,644.0	-138.04	-90.70	-138.04	0.30	0.29	-0.90	-13.58

## 2.3 Survey Name: Survey #3

Survey Name	Survey #3	Company	RYAN ENERGY TECHNOLOGIES
Started	12/9/2012	Ended	
Tool Name	EM	Engineer	El Paso

## 2.3.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
3,650.0	4.45	208.21	3,644.0	-138.04	-90.70

## 2.3.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/9/2012	Tie On	3,650.0	4.45	208.21	3,644.0	-138.04	-90.70	-138.04	0.00	0.00	0.00	0.00
12/9/2012	NORMAL	3,749.0	4.30	205.70	3,742.7	-144.77	-94.12	-144.77	0.25	-0.15	-2.54	-129.31
	NORMAL	3,780.0	4.10	207.70	3,773.6	-146.80	-95.14	-146.80	0.80	-0.65	6.45	144.78
	NORMAL	3,873.0	3.78	212.66	3,866.4	-152.32	-98.34	-152.32	0.50	-0.34	5.33	135.65
	NORMAL	3,966.0	3.12	217.37	3,959.2	-156.92	-101.53	-156.92	0.77	-0.71	5.06	159.10
	NORMAL	4,059.0	2.29	217.54	4,052.1	-160.40	-104.20	-160.40	0.89	-0.89	0.18	179.53
	NORMAL	4,152.0	1.71	243.25	4,145.1	-162.50	-106.57	-162.50	1.13	-0.62	27.65	135.28
	NORMAL	4,245.0	0.79	244.44	4,238.0	-163.40	-108.39	-163.40	0.99	-0.99	1.28	178.98
	NORMAL	4,338.0	1.19	225.54	4,331.0	-164.35	-109.66	-164.35	0.55	0.43	-20.32	-48.93
	NORMAL	4,432.0	1.71	221.94	4,425.0	-166.08	-111.29	-166.08	0.56	0.55	-3.83	-11.74
	NORMAL	4,525.0	1.32	236.66	4,518.0	-167.70	-113.11	-167.70	0.59	-0.42	15.83	142.26
	NORMAL	4,618.0	1.19	235.25	4,610.9	-168.84	-114.80	-168.84	0.14	-0.14	-1.52	-167.34
	NORMAL	4,711.0	1.71	262.54	4,703.9	-169.57	-116.97	-169.57	0.91	0.56	29.34	67.19
	NORMAL	4,803.0	1.49	262.06	4,795.9	-169.91	-119.52	-169.91	0.24	-0.24	-0.52	-176.75
	NORMAL	4,897.0	1.32	277.66	4,889.8	-169.94	-121.80	-169.94	0.44	-0.18	16.60	121.63
	NORMAL	4,990.0	1.41	298.53	4,982.8	-169.25	-123.87	-169.25	0.54	0.10	22.44	90.28
	NORMAL	5,083.0	1.32	262.05	5,075.8	-168.85	-125.93	-168.85	0.92	-0.10	-39.23	-113.95
	NORMAL	5,176.0	1.71	274.54	5,168.8	-168.89	-128.38	-168.89	0.55	0.42	13.43	46.61
	NORMAL	5,269.0	1.58	287.63	5,261.7	-168.39	-130.98	-168.39	0.43	-0.14	14.08	115.55

## 2.3.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/9/2012	NORMAL	5,362.0	1.58	272.03	5,354.7	-167.96	-133.49	-167.96	0.46	0.00	-16.77	-97.80
	NORMAL	5,455.0	1.80	274.76	5,447.7	-167.79	-136.22	-167.79	0.25	0.24	2.94	21.47
	NORMAL	5,548.0	1.80	255.07	5,540.6	-168.05	-139.09	-168.05	0.66	0.00	-21.17	-99.84
	NORMAL	5,641.0	1.71	253.84	5,633.6	-168.81	-141.84	-168.81	0.10	-0.10	-1.32	-157.90
	NORMAL	5,734.0	1.41	265.35	5,726.5	-169.29	-144.31	-169.29	0.46	-0.32	12.38	139.41
	NORMAL	5,826.0	1.41	283.46	5,818.5	-169.12	-146.54	-169.12	0.48	0.00	19.68	99.05
	NORMAL	5,919.0	1.71	250.15	5,911.5	-169.32	-148.96	-169.32	1.01	0.32	-35.82	-88.83
	NORMAL	6,012.0	2.42	262.06	6,004.4	-170.06	-152.21	-170.06	0.89	0.76	12.81	37.19
	NORMAL	6,105.0	2.29	267.77	6,097.3	-170.41	-156.01	-170.41	0.29	-0.14	6.14	121.82
	NORMAL	6,198.0	2.50	255.86	6,190.2	-170.97	-159.83	-170.97	0.58	0.23	-12.81	-73.15
	NORMAL	6,291.0	2.02	228.97	6,283.2	-172.55	-163.03	-172.55	1.24	-0.52	-28.91	-127.39
	NORMAL	6,385.0	1.80	216.66	6,377.1	-174.82	-165.16	-174.82	0.49	-0.23	-13.10	-124.26
	NORMAL	6,478.0	1.41	208.84	6,470.1	-176.99	-166.59	-176.99	0.48	-0.42	-8.41	-154.55
	NORMAL	6,571.0	1.58	210.86	6,563.1	-179.09	-167.80	-179.09	0.19	0.18	2.17	18.24
	NORMAL	6,664.0	0.79	208.36	6,656.0	-180.76	-168.76	-180.76	0.85	-0.85	-2.69	-177.50
	NORMAL	6,757.0	0.88	208.27	6,749.0	-181.95	-169.40	-181.95	0.10	0.10	-0.10	-0.88
	NORMAL	6,850.0	1.10	235.25	6,842.0	-183.09	-170.48	-183.09	0.55	0.24	29.01	78.63
	NORMAL	6,943.0	1.19	228.44	6,935.0	-184.24	-171.93	-184.24	0.18	0.10	-7.32	-59.96
	NORMAL	7,037.0	0.48	230.15	7,029.0	-185.14	-172.96	-185.14	0.76	-0.76	1.82	178.84
	NORMAL	7,130.0	1.32	221.14	7,122.0	-186.20	-173.97	-186.20	0.91	0.90	-9.69	-14.09
	NORMAL	7,223.0	0.70	248.17	7,215.0	-187.21	-175.20	-187.21	0.82	-0.67	29.06	155.45
	NORMAL	7,316.0	0.22	287.06	7,308.0	-187.37	-175.90	-187.37	0.59	-0.52	41.82	165.36
	NORMAL	7,409.0	0.62	219.43	7,401.0	-187.71	-176.39	-187.71	0.62	0.43	-72.72	-88.40
	NORMAL	7,502.0	0.48	192.14	7,494.0	-188.48	-176.79	-188.48	0.32	-0.15	-29.34	-131.31
	NORMAL	7,596.0	0.79	236.97	7,587.9	-189.22	-177.42	-189.22	0.60	0.33	47.69	81.80
	NORMAL	7,689.0	1.80	231.74	7,680.9	-190.47	-179.10	-190.47	1.09	1.09	-5.62	-9.29
	NORMAL	7,782.0	1.80	228.35	7,773.9	-192.35	-181.34	-192.35	0.11	0.00	-3.65	-91.69
	NORMAL	7,875.0	1.58	194.56	7,866.8	-194.56	-182.75	-194.56	1.08	-0.24	-36.33	-118.99
	NORMAL	7,968.0	0.62	156.06	7,959.8	-196.26	-182.87	-196.26	1.25	-1.03	-41.40	-160.58
	NORMAL	8,062.0	0.31	147.23	8,053.8	-196.94	-182.53	-196.94	0.34	-0.33	-9.39	-171.37
	NORMAL	8,155.0	0.48	141.16	8,146.8	-197.45	-182.15	-197.45	0.19	0.18	-6.53	-16.88
	NORMAL	8,248.0	0.31	121.83	8,239.8	-197.89	-181.69	-197.89	0.23	-0.18	-20.78	-151.31
	NORMAL	8,341.0	0.09	304.64	8,332.8	-197.98	-181.53	-197.98	0.43	-0.24	-190.53	-179.37
12/10/2012	NORMAL	8,435.0	0.40	303.76	8,426.8	-197.75	-181.87	-197.75	0.33	0.33	-0.94	-1.14
	NORMAL	8,528.0	0.70	284.95	8,519.8	-197.43	-182.69	-197.43	0.37	0.32	-20.23	-40.68
	NORMAL	8,621.0	1.01	263.55	8,612.8	-197.37	-184.05	-197.37	0.47	0.33	-23.01	-56.88
	NORMAL	8,714.0	1.01	243.64	8,705.8	-197.83	-185.60	-197.83	0.38	0.00	-21.41	-99.95
	NORMAL	8,807.0	0.79	244.04	8,798.8	-198.47	-186.91	-198.47	0.24	-0.24	0.43	178.56
	NORMAL	8,901.0	1.32	227.87	8,892.8	-199.48	-188.30	-199.48	0.64	0.56	-17.20	-37.57
	NORMAL	8,994.0	1.01	177.77	8,985.7	-201.02	-189.06	-201.02	1.10	-0.33	-53.87	-130.94
12/11/2012	NORMAL	9,087.0	1.41	221.85	9,078.7	-202.69	-189.79	-202.69	1.05	0.43	47.40	89.82
	NORMAL	9,180.0	0.09	166.96	9,171.7	-203.62	-190.54	-203.62	1.46	-1.42	-59.02	-176.90
	NORMAL	9,273.0	1.58	218.95	9,264.7	-204.68	-191.33	-204.68	1.64	1.60	55.90	54.65
	NORMAL	9,367.0	2.02	193.77	9,358.7	-207.30	-192.53	-207.30	0.95	0.47	-26.79	-73.89

## 2.4 Survey Name: Survey #4

Survey Name	Survey #4	Company	HALLIBURTON ENERGY SERVICES INC
Started	12/14/2012	Ended	
Tool Name	EFIELD	Engineer	El Paso

## 2.4.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
3,650.0	4.45	208.21	3,644.0	-138.04	-90.70

## 2.4.2 Survey Stations

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/14/2012	Tie On	3,650.0	4.45	208.21	3,644.0	-138.04	-90.70	-138.04	0.00	0.00	0.00	0.00
12/14/2012	NORMAL	3,700.0	4.27	251.16	3,693.8	-140.35	-93.38	-140.35	6.39	-0.36	85.90	114.42
	NORMAL	3,750.0	4.19	193.34	3,743.7	-142.73	-95.56	-142.73	8.18	-0.16	-115.64	-119.83
	NORMAL	3,800.0	3.80	192.66	3,793.6	-146.13	-96.35	-146.13	0.79	-0.78	-1.36	-173.41
	NORMAL	3,850.0	3.66	195.92	3,843.5	-149.28	-97.15	-149.28	0.51	-0.28	6.52	125.05
	NORMAL	3,900.0	3.63	200.03	3,893.4	-152.30	-98.13	-152.30	0.53	-0.06	8.22	98.60
	NORMAL	3,950.0	3.03	201.99	3,943.3	-155.01	-99.17	-155.01	1.22	-1.20	3.92	170.23
	NORMAL	4,000.0	2.84	204.88	3,993.3	-157.36	-100.18	-157.36	0.48	-0.38	5.78	143.52
	NORMAL	4,050.0	2.28	203.45	4,043.2	-159.40	-101.10	-159.40	1.13	-1.12	-2.86	-174.21
	NORMAL	4,100.0	2.01	212.21	4,093.2	-161.05	-101.96	-161.05	0.85	-0.54	17.52	133.79
	NORMAL	4,150.0	1.56	215.75	4,143.1	-162.35	-102.83	-162.35	0.93	-0.90	7.08	168.00
	NORMAL	4,200.0	1.35	218.73	4,193.1	-163.36	-103.59	-163.36	0.45	-0.42	5.96	161.67
	NORMAL	4,250.0	1.28	220.29	4,243.1	-164.24	-104.32	-164.24	0.16	-0.14	3.12	153.69
	NORMAL	4,300.0	1.16	218.52	4,293.1	-165.07	-105.00	-165.07	0.25	-0.24	-3.54	-163.45
	NORMAL	4,350.0	1.19	217.57	4,343.1	-165.87	-105.63	-165.87	0.07	0.06	-1.90	-33.47
	NORMAL	4,400.0	1.34	212.46	4,393.1	-166.78	-106.26	-166.78	0.38	0.30	-10.22	-39.52
	NORMAL	4,450.0	1.20	216.49	4,443.1	-167.69	-106.89	-167.69	0.33	-0.28	8.06	149.47
	NORMAL	4,500.0	1.20	204.01	4,493.1	-168.59	-107.41	-168.59	0.52	0.00	-24.96	-96.24
	NORMAL	4,550.0	1.23	215.33	4,543.0	-169.51	-107.93	-169.51	0.48	0.06	22.64	88.56
	NORMAL	4,600.0	1.24	202.42	4,593.0	-170.44	-108.45	-170.44	0.56	0.02	-25.82	-94.40
	NORMAL	4,650.0	1.70	207.80	4,643.0	-171.60	-109.00	-171.60	0.96	0.92	10.76	19.40
	NORMAL	4,700.0	1.46	230.79	4,693.0	-172.66	-109.84	-172.66	1.34	-0.48	45.98	121.97
	NORMAL	4,750.0	1.58	229.57	4,743.0	-173.51	-110.86	-173.51	0.25	0.24	-2.44	-15.70
	NORMAL	4,800.0	1.58	242.58	4,793.0	-174.27	-112.00	-174.27	0.72	0.00	26.02	96.50
	NORMAL	4,850.0	0.87	264.31	4,843.0	-174.63	-112.99	-174.63	1.67	-1.42	43.46	157.35
	NORMAL	4,900.0	1.22	258.98	4,892.9	-174.77	-113.89	-174.77	0.73	0.70	-10.66	-18.20
	NORMAL	4,950.0	1.26	256.33	4,942.9	-175.00	-114.94	-175.00	0.14	0.08	-5.30	-56.43
	NORMAL	5,000.0	1.62	267.16	4,992.9	-175.17	-116.18	-175.17	0.90	0.72	21.66	42.58
	NORMAL	5,050.0	1.54	261.69	5,042.9	-175.30	-117.55	-175.30	0.34	-0.16	-10.94	-120.66
	NORMAL	5,100.0	1.19	252.88	5,092.9	-175.55	-118.71	-175.55	0.81	-0.70	-17.62	-153.41
	NORMAL	5,150.0	1.08	247.03	5,142.9	-175.88	-119.64	-175.88	0.32	-0.22	-11.70	-136.41
	NORMAL	5,200.0	1.24	263.10	5,192.9	-176.13	-120.62	-176.13	0.72	0.32	32.14	71.99
	NORMAL	5,250.0	1.31	259.18	5,242.9	-176.30	-121.71	-176.30	0.22	0.14	-7.84	-53.22
	NORMAL	5,300.0	1.41	263.34	5,292.8	-176.48	-122.89	-176.48	0.28	0.20	8.32	46.73
	NORMAL	5,350.0	1.53	271.56	5,342.8	-176.54	-124.16	-176.54	0.48	0.24	16.44	64.51
	NORMAL	5,400.0	1.52	263.73	5,392.8	-176.59	-125.49	-176.59	0.42	-0.02	-15.66	-96.66
	NORMAL	5,450.0	1.58	265.97	5,442.8	-176.71	-126.84	-176.71	0.17	0.12	4.48	46.40
	NORMAL	5,500.0	1.79	264.70	5,492.8	-176.83	-128.30	-176.83	0.43	0.42	-2.54	-10.72
	NORMAL	5,550.0	1.69	246.21	5,542.7	-177.20	-129.76	-177.20	1.14	-0.20	-36.98	-109.25
	NORMAL	5,600.0	1.66	242.07	5,592.7	-177.84	-131.07	-177.84	0.25	-0.06	-8.28	-105.99
	NORMAL	5,650.0	1.70	240.22	5,642.7	-178.55	-132.35	-178.55	0.13	0.08	-3.70	-54.52
	NORMAL	5,700.0	1.54	235.04	5,692.7	-179.30	-133.55	-179.30	0.43	-0.32	-10.36	-140.10
	NORMAL	5,750.0	1.25	237.23	5,742.7	-179.98	-134.56	-179.98	0.59	-0.58	4.38	170.68
	NORMAL	5,800.0	1.42	243.19	5,792.7	-180.55	-135.57	-180.55	0.44	0.34	11.92	42.25
	NORMAL	5,850.0	1.45	251.87	5,842.6	-181.03	-136.72	-181.03	0.44	0.06	17.36	86.50
	NORMAL	5,900.0	1.45	248.17	5,892.6	-181.46	-137.91	-181.46	0.19	0.00	-7.40	-91.85
	NORMAL	5,950.0	1.90	243.00	5,942.6	-182.07	-139.24	-182.07	0.95	0.90	-10.34	-21.16
	NORMAL	6,000.0	1.94	243.22	5,992.6	-182.83	-140.73	-182.83	0.08	0.08	0.44	10.55
	NORMAL	6,050.0	1.72	249.23	6,042.5	-183.48	-142.19	-183.48	0.58	-0.44	12.02	141.88
	NORMAL	6,100.0	2.25	253.08	6,092.5	-184.03	-143.83	-184.03	1.09	1.06	7.70	16.05
	NORMAL	6,150.0	2.27	252.52	6,142.5	-184.61	-145.71	-184.61	0.06	0.04	-1.12	-48.11
	NORMAL	6,200.0	2.35	243.38	6,192.4	-185.37	-147.57	-185.37	0.75	0.16	-18.28	-82.34
	NORMAL	6,250.0	2.22	234.36	6,242.4	-186.39	-149.28	-186.39	0.76	-0.26	-18.04	-114.34
	NORMAL	6,300.0	1.88	218.95	6,292.4	-187.60	-150.58	-187.60	1.29	-0.68	-30.82	-129.21
	NORMAL	6,350.0	1.68	209.58	6,342.3	-188.87	-151.46	-188.87	0.70	-0.40	-18.74	-129.12
	NORMAL	6,400.0	1.72	203.07	6,392.3	-190.20	-152.11	-190.20	0.39	0.08	-13.02	-81.56

## 2.4.2 Survey Stations (Continued)

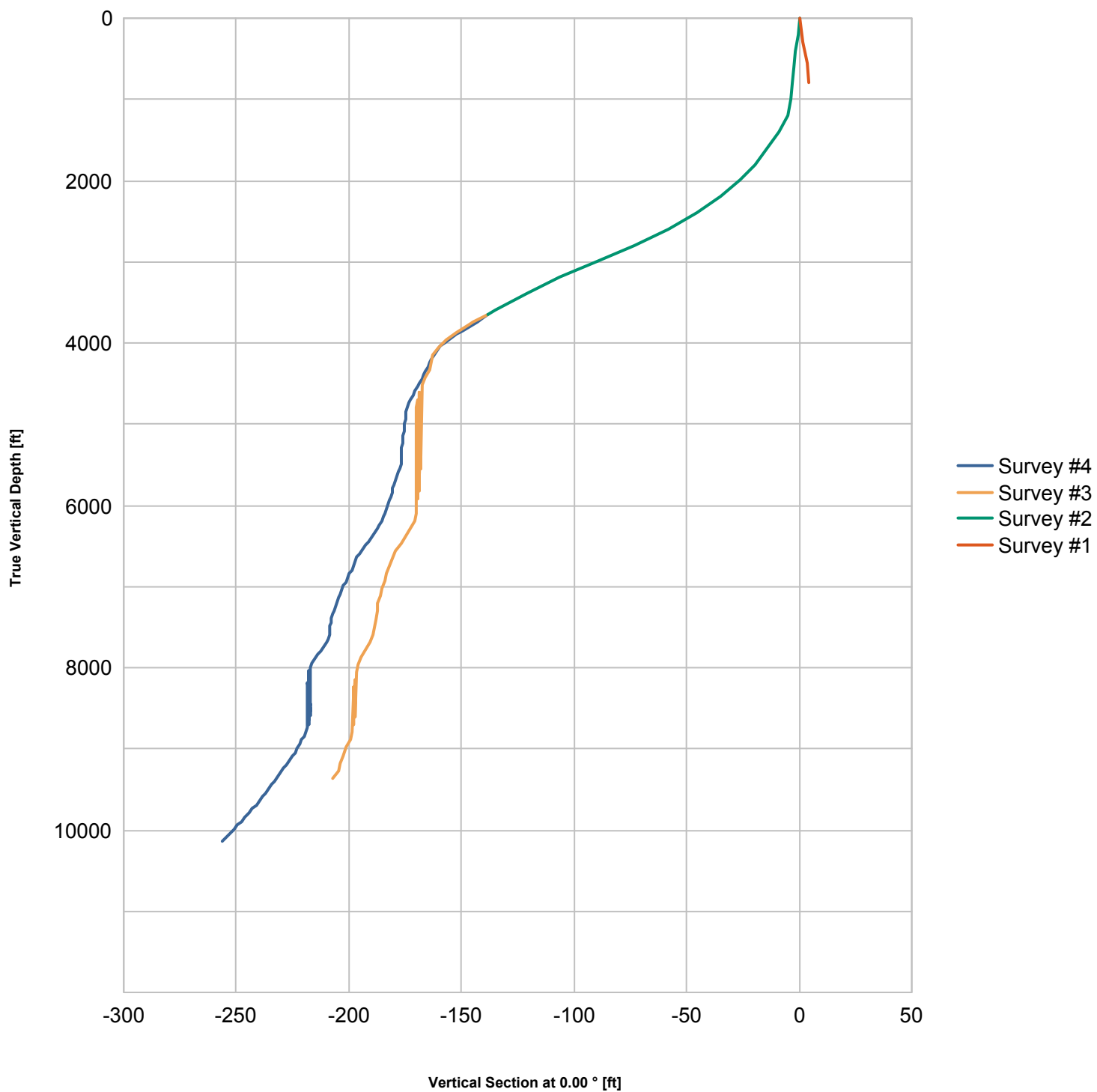
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/14/2012	NORMAL	6,450.0	1.34	191.99	6,442.3	-191.46	-152.53	-191.46	0.96	-0.76	-22.16	-147.55
	NORMAL	6,500.0	1.55	190.02	6,492.3	-192.70	-152.77	-192.70	0.43	0.42	-3.94	-14.30
	NORMAL	6,550.0	1.51	188.59	6,542.3	-194.02	-152.98	-194.02	0.11	-0.08	-2.86	-137.05
	NORMAL	6,600.0	1.54	197.47	6,592.3	-195.31	-153.28	-195.31	0.48	0.06	17.76	87.22
	NORMAL	6,650.0	1.06	184.40	6,642.2	-196.41	-153.52	-196.41	1.12	-0.96	-26.14	-154.72
	NORMAL	6,700.0	0.94	176.80	6,692.2	-197.28	-153.53	-197.28	0.36	-0.24	-15.20	-135.89
	NORMAL	6,750.0	0.88	177.24	6,742.2	-198.08	-153.49	-198.08	0.12	-0.12	0.88	173.58
	NORMAL	6,800.0	0.96	177.15	6,792.2	-198.88	-153.45	-198.88	0.16	0.16	-0.18	-1.08
	NORMAL	6,850.0	0.82	194.45	6,842.2	-199.64	-153.52	-199.64	0.60	-0.28	34.60	125.99
	NORMAL	6,900.0	1.05	199.44	6,892.2	-200.42	-153.76	-200.42	0.49	0.46	9.98	22.00
	NORMAL	6,950.0	1.37	208.64	6,942.2	-201.38	-154.20	-201.38	0.75	0.64	18.40	35.92
	NORMAL	7,000.0	1.01	197.55	6,992.2	-202.32	-154.62	-202.32	0.85	-0.72	-22.18	-152.85
	NORMAL	7,050.0	1.01	199.60	7,042.2	-203.16	-154.90	-203.16	0.07	0.00	4.10	91.02
	NORMAL	7,100.0	1.00	199.74	7,092.2	-203.98	-155.20	-203.98	0.02	-0.02	0.28	166.27
	NORMAL	7,150.0	0.76	203.67	7,142.2	-204.70	-155.48	-204.70	0.49	-0.48	7.86	167.84
	NORMAL	7,200.0	1.06	197.68	7,192.2	-205.44	-155.75	-205.44	0.63	0.60	-11.98	-20.60
	NORMAL	7,250.0	0.72	204.13	7,242.2	-206.17	-156.02	-206.17	0.71	-0.68	12.90	166.79
	NORMAL	7,300.0	0.70	195.84	7,292.1	-206.75	-156.23	-206.75	0.21	-0.04	-16.58	-105.14
	NORMAL	7,350.0	0.76	234.08	7,342.1	-207.24	-156.58	-207.24	0.96	0.12	76.48	102.36
	NORMAL	7,400.0	0.63	222.75	7,392.1	-207.63	-157.04	-207.63	0.38	-0.26	-22.66	-138.98
	NORMAL	7,450.0	0.61	187.92	7,442.1	-208.10	-157.26	-208.10	0.74	-0.04	-69.66	-110.36
	NORMAL	7,500.0	0.18	290.45	7,492.1	-208.34	-157.37	-208.34	1.34	-0.86	205.06	164.85
	NORMAL	7,550.0	0.38	244.77	7,542.1	-208.38	-157.60	-208.38	0.57	0.40	-91.36	-72.54
	NORMAL	7,600.0	0.87	231.65	7,592.1	-208.69	-158.04	-208.69	1.01	0.98	-26.24	-22.91
	NORMAL	7,650.0	1.33	231.44	7,642.1	-209.28	-158.80	-209.28	0.92	0.92	-0.42	-0.61
	NORMAL	7,700.0	1.55	216.28	7,692.1	-210.19	-159.65	-210.19	0.88	0.44	-30.32	-67.72
	NORMAL	7,750.0	1.82	215.95	7,742.1	-211.38	-160.52	-211.38	0.54	0.54	-0.66	-2.22
	NORMAL	7,800.0	1.90	209.08	7,792.1	-212.74	-161.38	-212.74	0.47	0.16	-13.74	-73.72
	NORMAL	7,850.0	1.61	195.08	7,842.0	-214.15	-161.97	-214.15	1.03	-0.58	-28.00	-130.94
	NORMAL	7,900.0	1.34	176.90	7,892.0	-215.41	-162.12	-215.41	1.07	-0.54	-36.36	-128.86
	NORMAL	7,950.0	1.03	158.94	7,942.0	-216.41	-161.93	-216.41	0.96	-0.62	-35.92	-138.60
	NORMAL	8,000.0	0.62	178.00	7,992.0	-217.10	-161.76	-217.10	0.98	-0.82	38.12	155.49
	NORMAL	8,050.0	0.75	123.46	8,042.0	-217.55	-161.47	-217.55	1.28	0.26	-109.08	-106.84
	NORMAL	8,100.0	0.65	113.19	8,092.0	-217.84	-160.94	-217.84	0.32	-0.20	-20.54	-133.62
	NORMAL	8,150.0	0.40	110.06	8,142.0	-218.02	-160.52	-218.02	0.50	-0.50	-6.26	-175.02
	NORMAL	8,200.0	0.74	105.41	8,192.0	-218.16	-160.04	-218.16	0.69	0.68	-9.30	-10.08
	NORMAL	8,250.0	0.64	81.71	8,242.0	-218.21	-159.45	-218.21	0.60	-0.20	-47.40	-120.90
	NORMAL	8,300.0	0.53	67.54	8,292.0	-218.08	-158.96	-218.08	0.36	-0.22	-28.34	-134.19
	NORMAL	8,350.0	0.43	61.62	8,342.0	-217.90	-158.58	-217.90	0.22	-0.20	-11.84	-156.56
	NORMAL	8,400.0	0.34	351.79	8,392.0	-217.67	-158.44	-217.67	0.89	-0.18	-139.66	-134.42
	NORMAL	8,450.0	0.47	292.28	8,442.0	-217.44	-158.65	-217.44	0.84	0.26	-119.02	-104.07
	NORMAL	8,500.0	0.68	286.28	8,492.0	-217.28	-159.13	-217.28	0.44	0.42	-12.00	-19.01
	NORMAL	8,550.0	0.78	266.82	8,542.0	-217.22	-159.75	-217.22	0.53	0.20	-38.92	-77.95
	NORMAL	8,600.0	0.81	257.70	8,592.0	-217.31	-160.44	-217.31	0.26	0.06	-18.24	-81.25
	NORMAL	8,650.0	0.92	249.42	8,642.0	-217.53	-161.16	-217.53	0.33	0.22	-16.56	-52.84
	NORMAL	8,700.0	1.14	237.71	8,692.0	-217.93	-161.95	-217.93	0.61	0.44	-23.42	-49.69
	NORMAL	8,750.0	1.04	217.28	8,742.0	-218.56	-162.65	-218.56	0.80	-0.20	-40.86	-114.50
	NORMAL	8,800.0	1.07	216.06	8,791.9	-219.30	-163.20	-219.30	0.07	0.06	-2.44	-37.44
	NORMAL	8,850.0	1.22	220.88	8,841.9	-220.08	-163.82	-220.08	0.36	0.30	9.64	35.13
	NORMAL	8,900.0	1.24	210.33	8,891.9	-220.95	-164.44	-220.95	0.45	0.04	-21.10	-90.24
	NORMAL	8,950.0	1.32	206.87	8,941.9	-221.93	-164.98	-221.93	0.22	0.16	-6.92	-45.75
	NORMAL	9,000.0	1.33	205.27	8,991.9	-222.97	-165.48	-222.97	0.08	0.02	-3.20	-75.68
	NORMAL	9,050.0	1.37	197.69	9,041.9	-224.06	-165.91	-224.06	0.37	0.08	-15.16	-81.18
	NORMAL	9,100.0	1.45	197.29	9,091.9	-225.23	-166.28	-225.23	0.16	0.16	-0.80	-7.21
	NORMAL	9,150.0	1.64	201.21	9,141.8	-226.51	-166.73	-226.51	0.43	0.38	7.84	31.05
	NORMAL	9,200.0	1.58	201.70	9,191.8	-227.81	-167.24	-227.81	0.12	-0.12	0.98	167.32

## 2.4.2 Survey Stations (Continued)

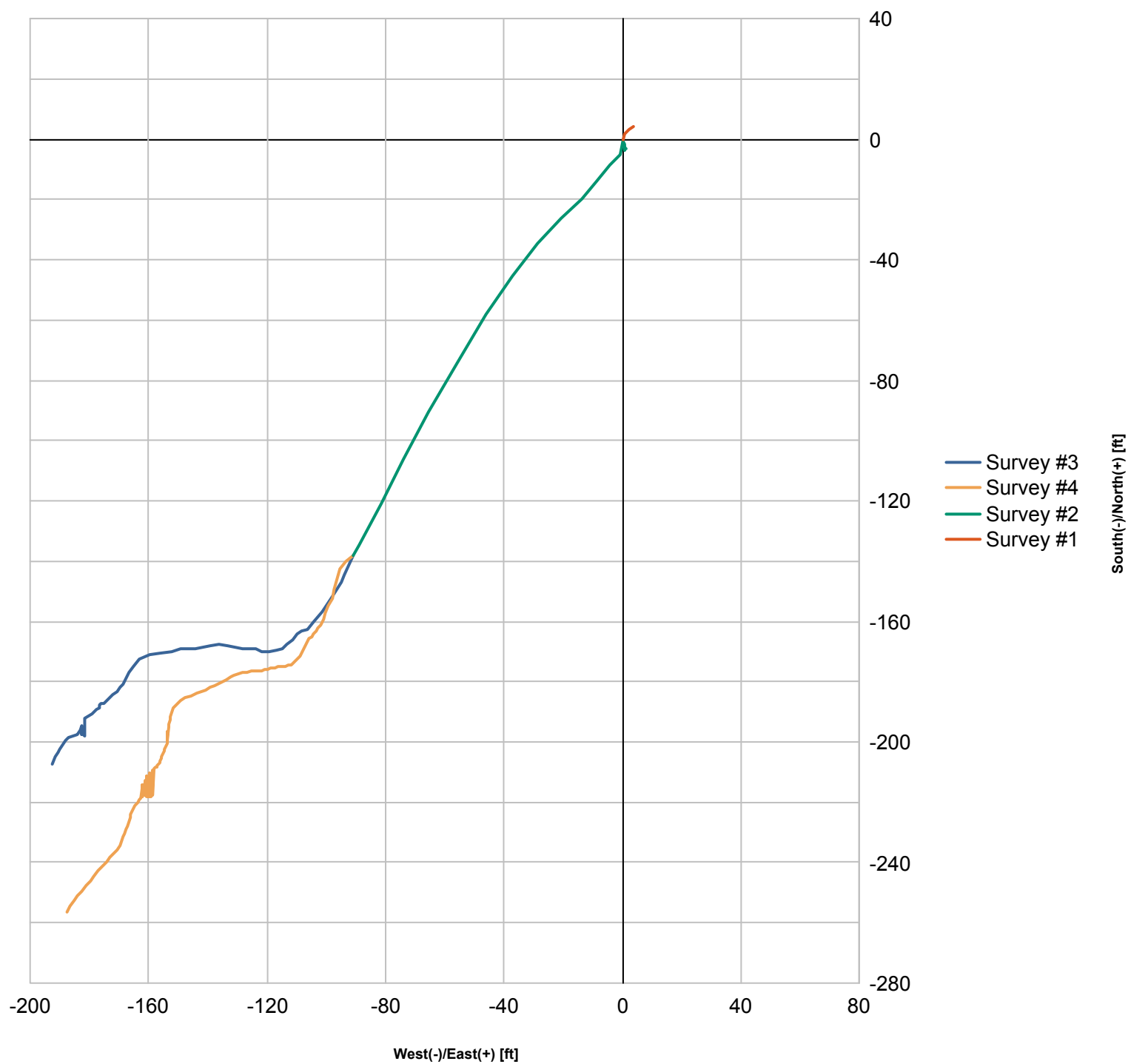
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/14/2012	NORMAL	9,250.0	1.54	196.77	9,241.8	-229.10	-167.69	-229.10	0.28	-0.08	-9.86	-109.05
	NORMAL	9,300.0	1.32	200.61	9,291.8	-230.28	-168.09	-230.28	0.48	-0.44	7.68	158.37
	NORMAL	9,350.0	1.74	198.87	9,341.8	-231.54	-168.54	-231.54	0.85	0.84	-3.48	-7.18
	NORMAL	9,400.0	1.88	202.54	9,391.8	-233.01	-169.10	-233.01	0.36	0.28	7.34	41.47
	NORMAL	9,450.0	1.63	214.12	9,441.7	-234.36	-169.81	-234.36	0.87	-0.50	23.16	130.88
	NORMAL	9,500.0	1.92	214.41	9,491.7	-235.64	-170.68	-235.64	0.58	0.58	0.58	1.92
	NORMAL	9,550.0	2.06	218.11	9,541.7	-237.04	-171.71	-237.04	0.38	0.28	7.40	44.40
	NORMAL	9,600.0	2.02	224.07	9,591.6	-238.38	-172.88	-238.38	0.43	-0.08	11.92	103.65
	NORMAL	9,650.0	2.43	222.52	9,641.6	-239.79	-174.21	-239.79	0.83	0.82	-3.10	-9.12
	NORMAL	9,700.0	2.33	221.11	9,691.6	-241.34	-175.59	-241.34	0.23	-0.20	-2.82	-150.35
	NORMAL	9,750.0	2.44	222.06	9,741.5	-242.89	-176.97	-242.89	0.23	0.22	1.90	20.24
	NORMAL	9,800.0	2.32	221.49	9,791.5	-244.44	-178.36	-244.44	0.24	-0.24	-1.14	-169.13
	NORMAL	9,850.0	2.40	219.71	9,841.4	-246.01	-179.70	-246.01	0.22	0.16	-3.56	-43.39
	NORMAL	9,900.0	2.51	219.95	9,891.4	-247.65	-181.07	-247.65	0.22	0.22	0.48	5.46
	NORMAL	9,950.0	2.62	219.38	9,941.3	-249.37	-182.50	-249.37	0.23	0.22	-1.14	-13.34
	NORMAL	10,000.0	2.44	218.22	9,991.3	-251.09	-183.88	-251.09	0.37	-0.36	-2.32	-164.70
	NORMAL	10,050.0	2.36	216.87	10,041.2	-252.75	-185.16	-252.75	0.20	-0.16	-2.70	-145.43
	NORMAL	10,100.0	2.71	211.83	10,091.2	-254.58	-186.40	-254.58	0.83	0.70	-10.08	-35.03
	NORMAL	10,150.0	2.43	215.84	10,141.1	-256.44	-187.64	-256.44	0.67	-0.56	8.02	149.28

### 3 Charts

#### 3.1 Vertical Section View



## 3.2 Plan View



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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: ALLISON 4-19C5	
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.	9. API NUMBER: 43013514660000	
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston, TX, 77002	PHONE NUMBER: 713 997-5038 Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1255 FSL 0540 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 19 Township: 03.0S Range: 05.0W Meridian: U	COUNTY: DUCHESNE	
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <b>9/4/2013</b>	<input checked="" type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

EP is on location performing routine operations and may need to acidize with 7500 gals.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: September 19, 2013

By: 

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A		DATE 9/4/2013

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> Fee
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> EP ENERGY E&P COMPANY, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> 1001 Louisiana, Houston, TX, 77002		<b>8. WELL NAME and NUMBER:</b> ALLISON 4-19C5
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1255 FSL 0540 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SESE Section: 19 Township: 03.0S Range: 05.0W Meridian: U		<b>9. API NUMBER:</b> 43013514660000
<b>PHONE NUMBER:</b> 713 997-5038 Ext		<b>9. FIELD and POOL or WILDCAT:</b> ALTAMONT
<b>COUNTY:</b> DUCHESNE		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 12/19/2014	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input checked="" type="checkbox"/> OTHER	
	OTHER: <input type="text" value="Downsize"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Downsized and deepened pump. See attached for details.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> February 13, 2015		
<b>NAME (PLEASE PRINT)</b> Maria S. Gomez	<b>PHONE NUMBER</b> 713 997-5038	<b>TITLE</b> Principal Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/12/2015	

## CENTRAL DIVISION

ALTAMONT FIELD  
ALLISON 4-19C5  
ALLISON 4-19C5  
WORKOVER LAND

### Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

## 1 General

### 1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

### 1.2 Well Information

Well	ALLISON 4-19C5		
Project	ALTAMONT FIELD	Site	ALLISON 4-19C5
Rig Name/No.	BASIC/1544	Event	WORKOVER LAND
Start date	12/15/2014	End date	12/20/2014
Spud Date/Time	11/25/2012	UWI	ALLISON 4-19C5
Active datum	KB @5,974.0ft (above Mean Sea Level)		
Afe No./Description	163926/52609 / ALLISON 4-19C5		

## 2 Summary

### 2.1 Operation Summary

Date	Time Start-End		Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
12/16/2014	6:00	7:30	1.50	WOR	28		P		TRAVEL TO LOCATION, HSM, RIG MOVE
	7:30	11:00	3.50	MIRU	01		P		RDMD 3-22C6 MOVE TO LOCATION, SLIDE ROTAFLEX BACK, SPOT & RIG UP RIG. HOT OILER PUMP 150 BBLS 2% KCL @ 200 DEG DOWN CSG. X/O TO ROD EQUIP
	11:00	13:30	2.50	WOR	18		P		L/D POLISH ROD & 2' SUB, ATTEMPT TO UNSEAT PUMP, UNABLE TO WORK PUMP OFF SEAT, BACK OFF RODS
	13:30	14:30	1.00	WOR	39		P		POOH W/ 84-1" EL RODS, 63 SLK, 21 W/G ( L/D 6 SLK WORN BOXES & SHOULDERS 3-7/8" EL RODS W/G. 2275' X/O TO TBG EQUIP,
	14:30	16:00	1.50	WOR	16		P		REMOVE 60' CAPSTRING ASSEMBLY, N/D 10K B-FLANGE, UNLAND TBG, WHILE ATTEMPTING TO REMOVE B-FLANGE, THREADS ON TUBING WERE GAULING, ATTEMPT TO RELEASE TAC IN TENSION, NO LUCK, RELANDTBG & N/U B-FLANGE, TBG SHUT IN, CSG TO SALES, SDFN.  2% KCL PUMPED = 200 BBLS DIESEL USED = 72 GAL PROPANE USED = 225 GAL
12/17/2014	6:00	7:30	1.50	WOR	28		P		TRAVEL TO LOCATION, HSM, RELEASEING TAC 0 PSI SITP, 200# FCP, BLEED OFF.
	7:30	9:00	1.50	WOR	16		P		N/D B-FLANGE, UNSCREW OFF TBG, ONLY BOTTOM THREADS WERE BAD, INSTALL 6'-2 7/8" TBG , HANGER, RELEASE TAC, LAND ON HANGER, N/U BOPS, R/U FLOOR & TBG EQUIP.
	9:00	10:30	1.50	WOR	39		P		L/D HANGER & SUBS, POOH W/ 68 JTS 2 7/8" N-80 TBG TO RODS. X/O TO RODS
	10:30	12:00	1.50	WOR	39		P		P/U ON RODS WEIGHING 4K, POOH W/ 102-7/8" EL RODS, X/O TO TBG
	12:00	14:00	2.00	WOR	39		P		POOH W/ 86 JTS 2 7/8" N-80 TBG, X/O TO RODS
	14:00	15:00	1.00	WOR	39		P		P/U ON RODS, NO WEIGHT SCREW BACK INTO ROD STRING, BACK OFF RODS, POOH W/ 23- 3/4" EL RODS, X/O TO TBG
	15:00	15:30	0.50	WOR	39		P		POOH W/ 18 JTS 2 7/8" N-80 TBG, X/O TO RODS

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	15:30 16:30	1.00	WOR	39		P		BACK OFF RODS, POOH W/ 84-3/4" EL RODS, 9-1 1/2" K-BARS. EOT @ 2550' ( LEFT IN HOLE 76 JTS TBG & BHA, 2 KARS & PUMP) TBG SHUT IN, CSG TO SALES, SDFN  2% KCL PUMPED = 100 BBLS DIESEL USED = 92 GAL PROPANE USED = 100 GAL
12/18/2014	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION, HSM, STRIPPING OOH W/ RODS & TBG 0 PSI SITP, 200# FCP, BLEED OFF
	7:30 9:00	1.50	WOR	39		P		EOT @ 2550', POOH W/ 78 JTS 2 7/8" N-80 TBG, L/D BHA & 2-1 1/2" K-BARS,PUMP. ( PUMP STUCK IN 4' SUB ABOVE SEAT NIPPLE )
	9:00 10:30	1.50	WLWORK	32		P		MIRU DELSCO SLICK LINE UNIT, RIH W/ 1 1/2" SINKER BARS, TAG @ 10106' WLD, BTM PERF @ 10088', POOH R/D SL UNIT
	10:30 16:00	5.50	WOR	39		P		P/U & RIH W/ 2 7/8" BULL PLUG, 2 JTS 2 7/8" N-80 TBG, 3 1/2" PBGA W/ DIP TUBE, 2'-2 7/8" TBG SUB, 2 7/8" SEAT NIPPLE, 4'-2 7/8" TBG SUB, 4 JTS 2 7/8" N-80 TBG, 5 1/2" TAC, 297 JTS 2 7/8" N-80 TBG ( TOP 57 JTS NEW ), INSTALL 6' TBG SUB & HANGER, SET TAC @ 9675' W/ 25K TENSION, LAND ON HANGER.  TUBING DETAIL KB = 17.00' STRETCH = 4.50' 299 JTS 2 7/8" N-80 TBG = 9640.55' 5 1/2" TAC = 2.75' 4 JTS 2 7/8" N-80 TBG = 126.96' 6' - 2 7/8" N-80 TBG SUB = 6.20' 2 7/8" SEAT NIPPLE = 1.10' 2' - 2 7/8" TBG SUB = 2.13' 3 1/2" PBGA W/ DIP TUBE = 31.71' 2 JTS 2 7/8" N-80 TBG = 63.55' 2 7/8" BULL PLUG = .75"  EOT @ 9897.20' 5 1/2" TAC @ 9662.05' 2 7/8" SEAT NIPPLE @ 9797.96'
	16:00 17:30	1.50	WOR	16		P		R/D FLOOR & TBG EQUIP, N/D BOPS, UNLAND TBG, REMOVE HANGER & 6' TBG SUB, INSTALL 10K B-FLANGE, LAND TBG, N/U B-FLANGE, HOOK UP FLOWLINE. INSTALL CAP STRING ASSEMBLY. X/O TO ROD EQUIP. SHUT TBG IN, CSG TO SALES, SDFN  2% KCL PUMPED = 50 BBLS DIESEL USED = 92 GAL PROPANE USED= 50 GAL
12/19/2014	7:00 8:30	1.50	WOR	28		P		TRAVEL TO LOCATION, HSM, P/U RODS 50# SITP & FCP, BLEED OFF CSG HOT OILER FLUSH TBG W/ 60 BBLS 2% KCL @ 200 DEG, SPOT 10 GAL CORROSION INHIBITOR. ( NOTE BASIC HAD COMPANY SAFETY MEETING AT 6 AM. )
	8:30 10:00	1.50	WOR	18		P		PREP RODS, X/O TO ROD EQUIP

## 2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	10:00 17:30	7.50	WOR	39		P		P/U & PRIME NOW 2 1/2" X 1 1/2" X 38' 2 STAGE HVR PUMP W/ 3' STABILIZER SUB, RIH W/ 18-1 1/2" K-BARS ( TOP 11 NEW ) 146 -3/4" EL RODS W/G ( TOP 33 NEW ) 132 - 7/8" EL RODS W/G ( 80 E/G, 8 W/ 6G NEW, 46 W/G TOP 20 NEW ) 46 -1" EL RODS E/G ( RIH W/ 21 W/G 62 SLK, L/D 62 SLK, P/U 25 NEW W/G ) EOR @ 8600' P/U POLISH ROD, SECURE WELL, CSG TO SALES, TBG SHUT IN, SDFN  2% KCL PUMPED = 240 BBLS DIESEL USED = 92 GAL PROPANE USED = 250 GAL
12/20/2014	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION, HSM, R/D RIG 50# SITP, 200# FCP, BLEED OFF
	7:30 9:00	1.50	WOR	39		P		EOR @ 8600', RIH P/U 45 NEW 1" EL RODS W/G ( 91 TOTAL) SPACE W/ 1" SUBS = 2-2', 2-4', 1-6' P/U POLISH ROD, HANG OFF
	9:00 10:00	1.00	WOR	23		P		HOT OILER FILL TBG W/ 40 BBLS 2% , PSI TEST TO 500#, STROKE TEST TO 1000# ( GOODTEST 0, PSI TEST CV TO 1000#, PUMP 15 BBLS 2% KCL @ 200 DEG ACROSS FLOWLINE
	10:00 12:00	2.00	RDMO	02		P		RDMO, SLIDE ROTAFLEX IN, CHECK PUMP, NO TAG GOOD PUMP ACTION, TURN WELL OVER TO OPERATOR. CLEAN LOCATION, MOVE TO 2-33C6.  2% KCL PUMPED = 70 BBLS DIESEL USED 40 GAL PROPANE USED = 25 GAL

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